

**EMOTIONAL INTELLIGENCE AS A CONTRIBUTING FACTOR  
OF PUPIL PERFORMANCE IN PUPILS WITH LEARNING  
DIFFICULTIES**

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## **Abstract**

The present study aimed at investigating the impact of Emotional Intelligence on pupil performance. Existing literature, even if it is limited, has revealed that such a relationship exists under particular circumstances. It was therefore interesting to look at this relationship under the prism of learning difficulties. The current study expands current literature in that it examines the relationship of emotional intelligence and pupil performance taking into consideration the influence of specific learning difficulties. Studies up to this point have not shed light on this triangulating relationship.

A case study methodology is utilized whereby a small sample of 13 primary school pupils (ages 9-10 years old) with learning difficulties is selected within a private school in Piraeus, Greece. Three research tools were employed to assess the impact of Emotional Intelligence on pupil's school performance: observation protocols, questionnaires and interviews. Data collection produced a range of qualitative data in the form of texts that were analyzed via the NVivo software program.

The findings revealed that Emotional Intelligence can impact on pupil performance in pupils with learning difficulties, as pupils with higher level of Emotional Intelligence managed to have better learning results. More specifically emotionally intelligent pupils were open to success and failure, had a growing intrinsic motivation for participation, complied with classroom rules, managed more effectively school stress and had higher levels of self-esteem.

The study has implications for the development of primary school curricula that take Emotional Intelligence into account when designing subject materials. The findings of this study may also assist stakeholders in the education sector in developing a better understanding of the impact of Emotional Intelligence on the performance of primary school pupils. By so doing, pupil performance could be improved, even in populations with learning difficulties.

**Keywords:** Emotional Intelligence, pupil performance, learning difficulties

# INTRODUCTION

Emotional intelligence involves the capacity to perceive emotions, incorporate emotion-related feelings, understand the emotional information and manage them in an effective way (Mayer, Salovey, and Caruso, 2004b).

The construct of Emotional Intelligence has been discussed a lot the last decades and researchers have created a lot of concepts, models and theories. In 1997 Mayer and Salovey have introduced the four-branch model of Emotional Intelligence (Mayer and Salovey, 1997). This model has been very useful for educational purposes (Bracket, Rivers, and Salovey, 2011). The first branch, emotion perception, is the ability to recognize and express emotions, which include bodily cues and thoughts. The second branch, facilitating thought, is the ability to use emotion to facilitate problem solving. The third branch, understanding emotion, is the awareness of hoe emotions combine and how we interpret meanings. The fourth branch, emotion management, is the ability to improve negative emotions and retain positive emotions in oneself and others. These four branches are important for the current study, as they allowed me to create the research tools and assess pupil's Emotional Intelligence, while I was looking at the potential influence on pupil performance.

Pupil performance is used in education terminology in order to describe the range of pupils' learning outcomes in formal education. On the contrary, poor performance sometimes has as a result failure that means pupils attainment has fallen below an expected standard. In case of failure pupils and often parents experience frustration. Oyinloye (2005) attributes the problem of low achievement to low level of Emotional Intelligence among students. He believes that "pupils who lack emotional intelligence show some adjustive challenges or in some ways fail to handle effectively the demands of school work. Such pupils might be said to have little or no Emotional Intelligence and may not be capable of attaining personal goals which include high achievement."

It is apparent that at the heart of primary education is a kind of pupil performance that has been measured using traditional Intelligence tests or other forms of standardized

examination. Schools do know emotional domains and personality factors contribute to the success of students (Nelson and Low, 2003). Based on that modern educators could success in their mission to help their pupils achieve more education through Emotional Intelligence concept. Thus, they could give children the chance to have a better start to life (Myers and Diener, 1995).

It has been hypothesized that Emotional Intelligence may be linked to pupil performance. Four major studies conducted on large samples in South Africa, Canada and the United States (Bar-On, 1997b, 2003; Parker et al., 2004; Swart, 1996) clearly indicate that there is a relationship between Emotional Intelligence and pupil performance. More current studies have also had similar findings (Brouzos et al., 2014; Bracket, Rivers, and Salovey, 2011; Ferrando et al., 2010; Hogan et al., 2010; Jiwen Song et al., 2010; Malekar and Mohanty, 2011; McCann et al., 2011; Laborde, Dosseville, and Scelles, 2010; Rafaila, 2015).

The results of these studies informed the current investigation that aims to determine whether particular aspects of Emotional Intelligence are related to pupil performance in a particular population: pupils with learning difficulties. It is important to examine the relationship between these two constructs because we may be able to predict which of these pupils will be successful in the school environment. In addition, if there is a relationship, then improving such populations' Emotional Intelligence might increase pupils' chances of school success.

Being a teacher myself, my goal in working with pupils is twofold: the acquisition of academic and social skills in order to create a personal investment in learning and of course increase students' engagement and enthusiasm for school. The challenge is even bigger if we talk about pupils with learning difficulties. Increasing their performance means supporting pupil to meet the defined academic standards of the school, as well as underlying social and behavioral needs. In my opinion performance of pupil's with learning difficulties could be improved with the intervention of personality facets and of course emotions take up the first place in that case. This was my motivation in order to start conducting this research and I really hope that its findings could implement in school's everyday life.

The thesis is divided into four chapters. The first one is devoted to the literature review and it incorporates definitions, theories and models of the three constructs of the study; Emotional Intelligence, Pupil Performance and Learning Difficulties. At the end of this chapter with the analysis of each one of these terms, a link is attempted between these terms through prior studies that have investigated their potential relationships.

In the second chapter, Methodology, the aim and rationale of the study and the research questions are presented. Further the method of the study, which is case study analysis, as well as the research tools, their strengths and weaknesses, are discussed. The last sections of this chapter describe the research procedure, the time frame and also ethical issues specific to the current study.

The next chapter, Analysis of the findings, is divided in two sections. The first section presents thoroughly the five case studies, whereas the second aims at a cross case study analysis which initially focuses on the comparison of the case studies and further on the analysis of the findings regarding the remaining pupils in the sample.

The fourth chapter has different sub-sections. The most robust section of this chapter though is the discussion that is split in two parts. The first part discusses the findings of the study in relation to the existing literature, whereas the second one suggests a potential framework of Emotional Intelligence which could be integrated within Greek schools.

The conclusion focuses on the implications and limitations of the study and on proposals for further research. The appendices are found at the end of the Thesis and include the interview schedule, the translated interviews of the children, as well as the completed questionnaires of the five case studies.

# CHAPTER 1

## Review of the Literature

This section describes the concept of Emotional Intelligence in terms of definitions and existing theories. It aims also to explore the links between the three pylons of the current study: Emotional Intelligence, Pupil Performance and Learning difficulties. An analysis of the concept of Pupil Performance reveals its key components and facets, also in relation to Emotional Intelligence; likewise the broad literature addressing Learning Difficulties is approached by highlighting those that hold more relevance for the current study.

### 1.1 Emotional Intelligence

#### 1.1.1 Definitions

Emotional intelligence (EI) has become a major topic of interest since the publication of a bestseller by the same name in the mid-90s (Goleman, 1995a). Despite the fact that the last decades interest in this concept has been increased, scholars and researchers have been studying EI for the greater part of the twentieth century, and we could find its historical roots to the nineteenth century (Darwin, 1872/1965).

In 1983, Harvard psychologist Howard Gardner introduced the idea of “multiple intelligences” which included not only verbal and mathematical skills but also interpersonal and intrapersonal effectiveness. In 1985, Wayne Leon Payne wrote a doctoral dissertation which included the term "emotional intelligence" in the title. This seems to be the very first academic use of the term "emotional intelligence" (Hein, 2005).

EI according to Mayer and Cobb (2000) refers to an individual's ability to recognize the meanings of emotions and their relationships in order to moderate his behavior on the basis of these. “It is a subset of social intelligence that involves the ability to monitor

one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions" (Salovey and Mayer, 1990, p.189).

EI involves the capacity to perceive emotions, incorporate emotion-related feelings, understand the emotional information and manage them in an effective way (Mayer, Salovey, and Caruso, 2004b). It includes "the ability to accurately perceive emotions, to assess and generate emotions so as to assist thought, to understand emotional knowledge and to reflectively regulate emotions so as to promote emotional and intellectual growth." (Mayer and Salovey, 1997, p.5). They therefore suggested an alternative definition few years after in order to conceptualize better the construct of EI :

"EI includes the ability to engage in sophisticated information processing about one's own and others' emotions and the ability to use this information as a guide to thinking and behavior. That is, individuals high in EI pay attention to, use, understand, and manage emotions, and these skills serve adaptive functions that potentially benefit themselves and others" (Mayer, Salovey, and Caruso, 2008, p.503).

Therefore, EI refers specifically to the combination of intelligence and emotion and the impact of this combination in everyday life (Ciarrochi, Chan, and Caputi, 2000).

According to Mayer, Salovey and Caruso (2004a), EI has relevance for all ages and researchers define it as the capacity to identify, control and assess the emotions at a personal and interpersonal level. EI is also defined as the ability to reason about emotions and emotional information, and of emotions to promote thought (Mayer and Salovey, 1997).

In 2007, based on the academic work of the Jack Mayer and Peter Salovey, Hein defined EI as "the innate potential to feel, use, communicate, recognize, remember, describe, identify, learn from, manage, understand and explain emotions". The main difference between Mayer Salovey's and Hein's definition is that describes EI as an innate potential. This means that each of us has born with a specific and unique potential for the following components of EI; Emotional sensitivity, Emotional memory, Emotional processing ability and Emotional learning ability (Hein, 2007).

Caruso (2004) gave an extended definition by broadening the limits of EI and defined it as “the ability to accurately identify emotions, use emotions to help you think, understand what causes emotions and manage to stay open to these emotions in order to capture the wisdom of our feelings.” (coming from a radio interview, February 2004).

EI has also been generally described as a competency to perceive and express in an accurate way emotion, to use emotion to facilitate thought, to understand emotions, and to manage emotions for emotional growth (Brackett, Mayer, and Warner, 2004). Coleman (2008) gave a more concrete definition by suggesting that EI is the ability to recognize one's own and other people's emotions, to discriminate between different feelings and label them appropriately, and to use emotional information to guide thinking and behavior.

It seems that the definition of EI has different dimensions and consists of numerous abilities which represent the wide range of identifying, understanding and expressing emotions, taking into consideration all the variables in terms of social interaction.

### **1.1.2 Models**

From Darwin to the present, a plethora of different conceptualizations and definitions of the construct of EI have appeared regarding the way this terminology is defined, measured and applied. The Encyclopedia of Applied Psychology (Cherniss, 2004) suggests that there are three major EI models: (a) the Mayer and Salovey model (1997) that defines this construct as the ability to perceive, understand, manage and use emotions to facilitate thinking; (b) the Goleman model (1998) that views it as an assortment of various competencies and skills that contribute to successful managerial performance; and (c) the Bar-On model (1997b) that describes EI as an array of interrelated emotional and social competencies and skills that influence intelligent behavior.

Mayer and Saloveys' theory of EI integrates aspects from the fields of intelligence and emotion (Stys and Brown, 2004) and this is the main reason that the particular theory is

used as a guide for this study's research tools, serving as a theoretical background. From intelligence theory comes the idea that intelligence involves the capacity to carry out abstract reasoning. From research conducted on emotions, comes the concept that emotions are signals that convey regular and discernible meanings about relationships and that there is a number of basic emotions which are universal (Mayer, Salovey, and Caruso, 2002a). The authors propose that individuals vary in their ability to process information of an emotional nature and in their ability to relate emotional processing to a wider cognition (Stys and Brown, 2004). Mayer and Salovey's conception of EI is based within a model of intelligence which struggles with defining EI within the standard criteria for a new type of intelligence (Mayer et al., 2003).

The current measure of Mayer and Salovey's model of EI, the Mayer-Salovey-Caruso EI Test (MSCEIT) was normed on a large sample of respondents worldwide. "The MSCEIT is designed for individuals 17 years of age or older and aims to measure the four abilities described in Salovey and Mayer's model of EI. Each ability (perception, facilitation of thought, understanding, and regulation) is measured using specific tasks. Perception of emotion is measured by rating the extent and type of emotion expressed in different types of pictures. Facilitation of thought is measured by asking people to draw parallels between emotions and physical sensations, as well as emotions and thoughts. Understanding is measured by asking the subject to explain how emotions can blend from other emotions.

The Mayer-Salovey-Caruso EI Test includes 141 items. The scale provides six scores: an overall EI score (Emotional Intelligence Quotient-EIQ), two area scores (Experiential Emotional Intelligence-EEIQ and Strategic Emotional Intelligence- SEIQ) and four branch scores representing the four branches of EI. Each score is expressed in terms of a standard intelligence with a mean score of 100 (average score) and a standard deviation of 15. Furthermore the manual provides qualitative ratings and descriptions that correspond to each numeric score. For example, an individual who receives an overall EIQ of 69 or less would be rated 'considerable development' whereas someone scoring 130 or more would be rated 'significant strength' (Mayer, Salovey, and Caruso, 2002b).



Reuven Bar-On was the one of the first who developed measures of EI and used the term "Emotion Quotient". Bar-On model's includes five components of EI: intrapersonal, interpersonal, adaptability, stress management, and general mood. Bar-On proposes that EI is a developing skill and that it can be improved through training, programming, and therapy (Bar-On, 2002).

“Bar-On's model of EI relates to the *potential* for performance and success, rather than performance or success itself, and is considered process-oriented rather than outcome-oriented. It focuses on an array of emotional and social abilities, including the ability to be aware of, understand, and express oneself, the ability to be aware of, understand, and relate to others, the ability to deal with strong emotions, and the ability to adapt to change and solve problems of a social or personal nature” (Fani, 2015, p.12).

Daniel Goleman, a psychologist and science writer who has occupied with brain and behaviour research for the New York Times, discovered the work of Salovey and Mayer in the 1990's. Inspired by their findings, he began to conduct his own research in the area and eventually he came up with the book *Emotional Intelligence* (1995), which introduced and familiarized both the public and private sectors with the idea of EI. Goleman's model outlines four main EI constructs. The first, self-awareness, is the ability to read one's emotions and recognize their impact while using feelings to guide decisions. Self-management, the second construct, involves controlling one's emotions and the ability to adapt oneself to changing circumstances. The third construct, social awareness, includes the ability to sense, understand, and react to other's emotions while comprehending social networks. Finally, relationship management, the fourth construct, involves the ability to inspire, influence, and develop others while managing conflict or under difficult circumstances (Goleman, 1998). Goleman includes a set of emotional competencies within each construct of EI. Emotional competencies are considered as learned capabilities that must be developed to achieve outstanding performance. Goleman posits that individuals are born with a general EI that determines their potential for learning emotional competencies (Boyatzis, Goleman, and Rhee, 1999).

EI is also frequently described as two different models, the *trait* model and the *ability* model (Bastian, Burns, and Nettelbeck, 2005; Petrides and Furnham, 2003). The *ability* model, as defined by Mayer, Salovey and colleagues (2004), describes a competency or ability to accurately perceive and identify one's own emotions as well as the emotions of others, and to use this knowledge to make desirable responses. They suggest that the *ability* model entails that EI is an ability that can be taught through training and similar to the traditional tests measuring intelligence.

The ability EI model is mostly assessed by the Multifactor Emotional Intelligence Scale (MEIS) or by the more recent Mayer- Salovey-Caruso EI Test (MSCEIT) (Mayer, Salovey, and Caruso, 2004a). Mayer and colleagues assess EI as a skill or ability rather than as a self-report of perceived emotional competence.

In contrast, trait models are mainly assessed via self-report and are designed to measure emotional abilities and positive social behaviors (Conte, 2005). The oldest measure of trait EI is the Emotional Quotient Inventory (EQ-i; Bar-On, 1997), a self report measure of traits related to emotional and social knowledge that influences an individual's ability to cope in an effective way.

A second self-report measure of trait EI, the Emotional Competency Inventory (ECI), is based on Goleman's (2003) model of EI and purports to assess abilities or competencies in four areas: self-awareness, self-management, social awareness, and relationship management.

A key difference between the ability and trait models is the manner in which they are assessed. The different ways in which these EI models are assessed have direct bearing on the other types of constructs with which they are correlated and the types of EI that are being measured. For example, the MSCEIT, which assesses ability EI, appears to be distinct from trait EI both conceptually and empirically. The MSCEIT is only correlated with trait measures of EI such as the EQ-i and ECI (Mayer, Salovey, and Caruso, 2004a), and actually shows higher correlations with traditional measures of intelligence (Conte, 2005), academic success as measured by GPA (Mayer et al., 2004), coping styles, and emotion regulation (Bastian, Burns, and Nettelbeck, 2005).

The MSCEIT is also only correlated with measures of personality (Brackett, Mayer, and Warner, 2004; Mayer, Salovey, and Caruso, 2004a; Conte, 2005).

On the other hand, measures of *trait* EI such as the EQ-i and ECI appear to overlap heavily with the constructs of personality and coping style. Moreover, despite claims of these types of EI measures being associated with improved outcomes, the EQ-i was shown to be a poor predictor of success as measured by GPA in a study of 160 Canadian college students (Conte, 2005). Although some researchers suggest that higher scores on the ECI are associated with greater effectiveness in the workplace (Emmerling and Goleman, 2003), other researchers suggest that ECI overlaps too much with measures of personality and motivation to be a useful and distinct construct (Conte, 2005; Petrides, Frederickson, and Furnham, 2004; Van der Zee, Thijs, and Schakel, 2002). This has led critics of the EI concept to suggest that EI contributes little to our knowledge despite what decades of research on the concepts of cognitive intelligence personality, and coping has already shown (McCrae, 2000).

There is a significant amount of debate within the EI literature concerning the two models of EI (ability vs. mixed), as many researchers have attempted to address the issue of which model represents EI in the most accurate way. Supporters of the ability model propose that the mixed model of EI is less genuine. Ability model supporters argue that research based on ability measures has demonstrated that EI is a clearly defined construct with evidence of incremental validity (Brackett and Mayer, 2003).

However, some researchers believe that the ability model focuses too strictly on traditional intelligence-based psychometric criteria. They argue that intelligence should incorporate many more facilities which have traditionally been beyond its scope. Researchers, such as Howard Gardner, support that standardized intelligence tests are not so appropriate to assess success in school or life, so they could not be used for a mixed model of EI (Gardner, 1999).

The last decades and despite these critics mentioned above, numerous research studies have been conducted that showed a positive interaction between EI and personality facets. Research on academic success has focused on the influence of

cognitive factors. Important is that even if the relationship between EI and personality and these areas of performance is strong and consistent, there is still room for improvement (Mc Cann, 2003).

Among the most famous models, the Bar-On model, provides the theoretical basis for the EQ-i, which was originally developed to assess various aspects of this construct as well as to examine its conceptualization. According to this model, emotional-social intelligence is a cross section of interrelated emotional and social competencies, skills and facilitators that determine how effectively we understand and express ourselves, understand others and relate with them, and cope with daily demands. The emotional and social competencies, skills and facilitators referred in this conceptualization include the five key components described above; and each of these components comprises a number of closely related competencies (Bar-On, 2006).

Bar-On proposed that “to be emotionally and socially intelligent is to effectively understand and express oneself, to understand and relate well with others, and to successfully cope with daily demands, challenges and pressures.” (IOLC, 2011, p.501). The characteristics of the emotionally and socially intelligent people include the ability to be aware of others’ emotions, feelings and needs, and to establish and maintain cooperative, constructive as well as satisfying relationships. More specifically being emotionally and socially intelligent means that the person is able to manage changes at any level of life (personal, social and environment), solve problems and taking decisions. In other words individuals need to be optimistic, positive and self-motivated (Bar-On, 2006).

The term “Emotional quotient” (EQ) was also introduced by Reuven Bar-On in 1988. He developed an assessment tool to measure EQ, the Emotional Quotient Inventory (EQ-i). According to Bar-On (2002), EI is "an array of non cognitive capabilities, competencies, and skills that influence one's ability to succeed in the coping with environmental demands and pressures" (Bar-On, 2002, p.14). Broadly defined, EI "addresses the emotional, personal, social, and survival dimensions of intelligence" (Bar-On, 2002, p.1)

The EQ-i, as a self-report measures emotionally and socially intelligent behavior (emotional-social intelligence). The EQ-I has the first measure widely used measuring emotional-social intelligence since its first publication (1996). “The original version of the EQ-i comprises 133 items in the form of short sentences and employs a 5-point response scale with a textual response format ranging from “very seldom or not true of me” (1) to “very often true of me or true of me” (5). The EQ-i is suitable for individuals 17 years of age and older” (Bar-On, 2006). Based on the Flesch- Kincaid (Kincaid,1975;1988) formula of readability, which was designed to indicate how difficult a reading text in English is to understand, the reading level in English has been assessed at the North American sixth grade level. It takes approximately 30 minutes to complete the inventory; and it typically takes less time to complete the online version. A list of the inventory’s items is found in the Bar-On EQ-i Technical Manual (Bar-On, 2006).The EQ-i includes the following four validity indicators: Omission Rate (number of omitted responses), Inconsistency Index (degree of response inconsistency), Positive Impression (tendency toward exaggerated positive responding) and Negative Impression (tendency toward exaggerated negative responding). (<http://www.reuvenbaron.org>)

### ***Critically discussing the three models***

The three models, which have analytically been presented above, have some critical differences. The first model, created by Peter Salovey and John Mayer, describes E.I. as a cognitive ability. Reuven Bar-On regards E.I. as a mixed intelligence that includes cognitive ability and personality aspects. This model emphasizes how cognitive and personality factors influence general well-being. The third model, introduced by Daniel Goleman, also perceives E.I. as a mixed intelligence involving cognitive ability and personality aspects. However Goleman's model focuses on how cognitive and personality factors determine success within the workplace.

Although the three models of EI differ in terms of that they conceptualize EI there are theoretical and statistical similarities between the various models. All the models aim to understand and measure the elements involved in the recognition and regulation of

one's own emotions and the emotions of others (Goleman, 2001). The three models also agree that there are certain key components to EI, and there is even some consensus on what those components are. One of these components is for example emotional perception and emotional management.

Statistical analysis has shown the above mentioned relationship between elements of the models. Studying the descriptions of the measures of EI, it could be assumed that different measures of EI are related and may be measuring similar components (Stys and Brown, 2004). Brackett and Mayer (2003) found significant similarities between the Mayer-Salovey-Caruso EI Test and the interpersonal EQ scale of the Bar-On Emotion Quotient Inventory. In the same vein similarities have been also between self-report measures of EI.

As the current study conceptualizes EI as a skill or ability rather than a self-reported measure of perceived emotional competence, it employs Mayer and Salovey's model in analyzing the data. More precisely, it takes into consideration the four abilities of their model (perception, facilitation of thought, understanding, and regulation) in order to design research tools and effectively categorize the collected data.

### **1.1.3 Theories**

EI researchers discuss a number of human capacities related to identifying and understanding emotions and also involving emotional information processing. In 1990, Salovey and Mayor proposed that these abilities made up a unitary EI, as in the abstract of the 1990 article they wrote "This article presents a framework for *EI*, a set of skills hypothesized to contribute to the accurate appraisal and expression of emotion in oneself and in others, the effective regulation of emotion in self and others, and the use of feelings to motivate, plan and achieve in one's life." (p.2)

In a 1997 publication Mayer and Salovey listed four branches and offered a detailed chart reflecting their thoughts. In that article they say that the branches in the chart are "arranged from more basic psychological processes to higher, more psychologically

integrated processes. For example, the lowest level branch concerns the (relatively) simple abilities of perceiving and expressing emotion. In contrast, the highest level branch concerns the conscious, reflective regulation of emotion." (p.10).

Looking at the model from the left to the right we could assume that early developed abilities are to the left branch whereas later developing abilities are to the right. Additionally Mayer and Salovey (2004, p.36) also supported that "people high in EI are expected to progress more quickly through the abilities designated and to master more of them.". The Four branches of EI, discussed below, are Perception Appraisal and Expression of Emotion; Emotional Facilitation of Thinking, Understanding and Analyzing Emotions; Employing Emotional Knowledge; and Reflective Regulation of Emotions to Promote Emotional and Intellectual Growth.

***Perception, Appraisal and Expression of Emotion*** consists of different abilities. On the first level it is recognized as the ability to identify emotion in one's physical states, feelings and thoughts. Further, it includes the ability to identify emotions in other people, designs, artwork through language, sound, appearance and behavior and accurate expression of emotions and needs related to those feelings. On the final level it depicts one's ability to discriminate between accurate and inaccurate, or honest vs. dishonest expressions of feeling.

***Emotional Facilitation of Thinking*** represents emotions prioritize thinking by directing attention to important information. Furthermore, through emotional facilitation, emotions are sufficiently vivid and available that they can be generated as aids to judgment and memory concerning feelings. It also encourages consideration of multiple points of view and finally encourages specific problem-solving approaches such as when happiness facilitates inductive reasoning and creativity.

***Understanding and Analyzing Emotions*** by employing Emotional knowledge is fundamentally the ability to label emotions and recognize relations among the words and the emotions themselves and the ability to interpret the meanings that emotions convey regarding relationships. It also represents one's ability to understand complex feelings and recognize likely transitions among emotions as well.

The advanced level of EI is ***Reflective Regulation of Emotion*** to Promote Emotional and Intellectual Growth. This level involves abilities such as staying open to both pleasant and unpleasant feelings, engaging or detaching from an emotion depending upon its judged informativeness or utility. Furthermore, it “represents the ability to reflectively monitor emotions in relation to oneself and others and to manage emotion in oneself and others by moderating negative emotions and enhancing pleasant ones, without repressing or exaggerating information they may convey” (Mayer and Salovey, 1997,p.14). (Hein, 2007)

Theories of EI support that EI can be developed and improved. Research has supported the idea that EI competencies can be significantly improved over time. This development can be divided into personal and social competences. Personal competence consists of self-awareness and self-management. Social competence consists of social awareness and relationship management, including empathy, leadership, communication, change catalyst, conflict management, building bonds, teamwork and collaboration. (Emmerling and Goleman, 2003) Theories of EI, which are presented above, suggest different levels, from basic to the highest that are internalized progressively. Theories reveal a developmental model of EI from childhood to adulthood. Within each level, skills can be identified that are early developing and skills that await greater maturity.

## **1.2 Pupil Performance**

### ***1.2.1 Definitions and Theories***

Pupil performance is used in education terminology in order to comprehend the range of learning outcomes concerning pupils and students. It is a broad term that integrates aspects of pupils’ progress, goals, performance, as well as the improvement of interpersonal and intrapersonal skills.

Slavin and Madden (2001) assumes that a key aspect in pupil performance is to measure what a pupil has gained during teaching and not only his grades and point scores. As most of the teachers have in mind a special program to follow they



sometimes caught in the trap of measuring strictly an individual's attainment based only on numeric scores.

Ann Colley and colleagues (1994) suggested that there are at least four-scale achievement that a school needs to develop. First of all, dealing with the capacity to remember and use facts. This aspect refers to the type of performance that public examinations tend to measure mostly in written form and it focuses on memorizing and reproducing knowledge abilities of the pupil. A step above we find practical and spoken skills including also problem-solving and investigation skills. Another aspect of performance according to Hargreaves and his colleagues (1995) are personal and social skills and foremost the ability to communicate with and relate to others. It also refers personal facets such as initiative, self-reliance and leadership potential. The final aspect consists of motivation, self-esteem and self-confidence (MacGilchrist et al., 2004).

Pupil performance could be broken down in three broad categories: what will pupils attain, what pupils' progress will be and how will the pupils respond in lessons and around the school. The word 'performance' describes the end-result of the educative process. This incorporates the attainment, progress and response of pupils, and other goals (Gipps, 1994). However, Merriam Webster dictionary (2013) defines pupil performance as 'the act of performing' and more specifically the action and work to be performed so as to accomplish or bring to completion. Furthermore the term involves execution, accomplishment and fulfillment. In the present study, the term performance is related to grades, progress and the overall presence a pupil has within the class.

Pupil's performance, as mentioned above, is a multifaceted topic that is also influenced by socio-emotional characteristics. More specifically, learning social and emotional skills can have a positive impact on pupil attainment and performance. Emotions can support or impede pupils' learning, their academic engagement, work ethic, commitment, and ultimate school success (Coleman and Hoffer, 1987; Coleman, Hoffer, and Kilgore, 1982).

Pupil performance is influenced by a number of specific social and emotional competencies. Pupils who are self-confident about their learning skills (Dika and Singh,

2002) have the strong belief that most of their basic abilities can be developed through dedication and hard work so they persist when faced with learning challenges. These pupils also set goals, manage stress and organise their school work. The result is to achieve by the end of the school year higher grades (Ditton, Krüsken, and Schauenberg, 2005), and use problem-solving skills to barrier any other obstacles aiming at doing better academically (Domina, 2005).

Social and emotional competencies have been found to be a more significant determinant of pupil attainment compared to IQ (Duckworth and Seligman, 2005). Many studies in secondary and university education have shown connections between emotional variables and academic performance (Bandura, 2001).

### ***1.2.2 Social and Emotional Learning***

Strongly connected to EI theories are Socio- Emotional Learning programs (SEL). SEL is the process through which children and adults acquire the knowledge, attitudes, and skills associated with the core areas of social and emotional (SE) competency and it consists of different categories; **Self-Awareness**: identifying and recognizing emotions; accurate self-perception; recognizing strengths, needs, and values; self-efficacy, **Self-Management**: impulse control and stress management; self-motivation and discipline; goal setting and organizational skills, **Social Awareness**: perspective taking; empathy; difference recognition; respect for others, **Relationship Skills**: communication, social engagement, and relationship building; working cooperatively; negotiation, refusal, and conflict management; help seeking, **Responsible Decision-making**: problem identification and situation analysis; problem solving; evaluation and reflection; personal, social, and ethical responsibility (Collaborative for Academic, Social, and Emotional Learning, CASEL, 2003).

“Social and emotional learning (SEL) is the process through which children and adults acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible

decisions. “ (Elias, 2004, p.53). Emotional learning programs could have positive effect on social behaviors, fewer conduct problems, less emotional distress, and ultimately improve test scores and grades (Greenberg et al. 2003).

Socio-Emotional Learning skills could be taught, practiced, and applied to diverse situations so that students will be supplied with the skill to use them as part of their daily behavior (Weissberg et al., 2003). Zins et al. (2004) believe that through SEL programming, pupils and students could improve their connection to school, classroom behavior, and academic achievement.

Important findings concerning SEL come from a key review of research conducted on interventions that promote children’s social and emotional development (Durlak and Dupre, 2007). This review of more than 700 studies included school, family, and community interventions and it was designed to promote social and emotional skills in children and adolescents between the ages of 5 and 18. There were three main studies about (a) school-based interventions, (b) after-school programs, and (c) programs for families. The meta- analysis of this study revealed that SEL programming promotes the development and use of these SE competencies in terms of creating safe and supportive school, family, and community learning environments in which children feel safe, secure, respected, connected to school, and engaged in learning (CASEL, 2011).

Elias et al. (1997) have also indicated that schools will be most successful and effective in case that they promote academic, social and emotional learning. Researchers support the idea that lifelong learning and academic performance are also improved through SEL. Emotions can facilitate their learning and their ultimate success in school and life (Zins, 2004). “Additional research shows that prosocial behavior in the classroom is directly linked with positive intellectual outcomes and performance on standardized achievement tests” (Zins, 2004, p.3-4). These findings are critical for teachers, who can use social-emotional learning methods to manage their classroom more effectively and to cope with students. School-based programmes of social and emotional learning can indeed help young people to acquire the skills they need to make good academic progress. The next section refers to Social Emotional Learning Methods.

Social and Emotional Learning Methods include a variety of methods. In 2000 Adelman and Taylor proposed a school model in accordance with SEL programs including coordination, classroom-focused enabling, support for transitions and home involvement in schooling. The focus was on helping schools create positive environments conducive to learning. Success in schools could be reflected in many ways not only regarding strict score criteria but also social behaviour. Effective SEL interventions are also aiming at enhancing the social environment factors that influence learning in order to be able to create a caring, supportive and conducive to success learning environment (Hawkins et al.,1998).

Furthermore, a range of correlational and longitudinal studies have shown correlations between emotional variables and academic performance (Caprara et al., 2000; Wang et al., 1997). Emotional learning programs could have a positive impact not only related to social behaviors but also could influence positively stress management as well as performance (Greenberg et al., 2003). Through systematic instruction, SEL skills “may be taught, modeled, practiced, and applied to diverse situations so that students use them as part of their daily behavior” (Durlak et al., 2011, p.406).

The main findings of a recent study (Roger et al., 2008), which implemented SEL programs in students demonstrated improvement in multiple areas of their personal life and academic level, while it simultaneously affected positively social behaviors, attitudes toward self, school and others and academic performance. Furthermore, research conducted indicates that social and emotional learning (SEL) programming for primary school pupils is a very promising approach to reduce problem behaviors by promoting positive adjustment and enhancing performance (Diesktra, 2008; Greenberg et al., 2003; Weissberg, Kumpfer, and Seligman, 2003).

In order to present an effective intervention through these SEL programs we could say that in the center of this program exist emotional, social and interpersonal skills and cognitive abilities. The program influences by teacher background, the school/classroom context and socio-emotional competence. Further it also have implication in community, district, state and federal policy. These terms include a big number of interactions and potential relationships. It is emerged that in order to implement such a program a fundamental change of the total function of the school

community is required. To focus on EI though we could say that SEL programs offer the opportunity to make even pupils that they do not have developed appropriately their EI the opportunity not only to perform better but to feel safer and more positive towards learning. Social and Emotional Learning is not focused on the classroom or an individual subject, but it is a strategy that penetrates the function and more specifically the mentality of the school.

Connected to this growing body of literature, "it is widely believed that SEL programs are among the most successful youth development programs offered to school- age youth." (Casel, 2008, p.3). At the same time they were positively influenced regarding their social behaviors, attitudes toward self, school and others and academic performance. Furthermore, a big number of studies, conducted during the past few decades, indicated that social and emotional learning (SEL) programming is also beneficial for elementary school students as it reduces problem behaviors promoting positive adjustment, and enhances attainment (Diesktra, 2008; Greenberg et al., 2003; Weissberg, Kumpfer, and Seligman, 2003).

Summarising the review of the literature so far, we could conclude that there is a gradually increasing number of scientifically based research studies supporting the relation between social and emotional behaviors (EI) and success in school and ultimately in life (Pupil Performance). As the literature review revealed, EI is perceived as a relatively new construct and this is the main reason for the existence of a high number of definitions and theories. While most definitions have many aspects in common, a crucial difference seems to have been developed between those that are more connected to traits and personality and associated measures and those that are directed towards performance and ability. Parts of the latter definitions could be used to find the potential link in order to be able to predict success in school, academics and other areas. Although several studies have been conducted so far in the field of EI and achievement-success, as described in sections 1.4.1 and 1.4.2, there is a lack of research concerning pupil performance in primary school. This lack of research is even more obvious in the field of learning difficulties, a field drawing much scholarly interest the last decades as more and more pupils are diagnosed with one or more of them.

### **1.3 Learning Disabilities-Difficulties**

In this sub-section, we will first refer to some important terminology notes. In UK education services the term 'learning difficulty' is used to describe 'specific learning difficulties', for example dyslexia, but it does not include a significant general impairment of intelligence. General impairments in learning are described by terms such as 'moderate learning difficulty', 'severe learning difficulty' and 'profound multiple learning difficulty'. These terms could be seen as interchangeable with the term 'learning disability' as they are used by experts in order to describe moderate, severe and profound learning disabilities. In other English speaking countries the use of the term 'intellectual disability' is increasing. In the U.S.A the term 'learning disability' is used for a wide range of specific learning disorders. These difficulties are particularly correlated to reading and writing (dyslexia) and mathematics (dyscalculia) ([www.bild.org.uk](http://www.bild.org.uk)).

In the present study the term Learning Difficulties have been chosen as it describes more accurate the deficits of the sample. However, learning disability is more commonly used in the international literature and this is the reason that it is presented in a lot of the references below.

#### **1.3.1 Definitions**

Learning disability is a general category of special education including disabilities in any of seven specific areas: (1) receptive language (listening), (2) expressive language (speaking), (3) basic reading skills, (4) reading comprehension, (5) written expression, (6) mathematics calculation, and (7) mathematical reasoning. These types of disabilities are often difficult to be distinguished as they may co-exist with other social skill deficits and emotional or behavioral disorders such as attention deficit disorder (AD/HD). LD is often assumed as reading disability or dyslexia, but this does not appeal to the real content of difficulty as mentioned above (Lyon, 1989; 1995). It seems crucial though to mention that learning disabilities are mostly connected to deficits in reading skills (Lyon, 1995). The Learning Disability Association of Canada (2000) states that:

“Learning Disabilities refer to a number of disorders which may affect the acquisition, organization, retention, understanding or use of verbal or nonverbal information. These disorders affect learning in individuals who otherwise demonstrate at least average abilities essential for thinking and/or reasoning. As such, learning disabilities are distinct from global intellectual deficiency.”

In addition, neurodevelopmental syndromes are also considered as “specific learning difficulties”. These difficulties include: dyspraxia, specific language impairment (SLI) and hyperactivity and attention deficit (Deponio, 2005). A child may often exhibit more than one of these complex syndromes and it is widely believed that the co-occurrence of these disabilities may be caused by overlapping developmental pathways and interacting genetic and environmental influences (Duane, 2002).

The population of the current research had specific language disorders such as dyslexia (difficulties in verbal and written language), dysgraphia (difficulties in orthography or/and handwriting), and/or ADHD, which I proceed now to discuss. One pupil of the sample was also marginally diagnosed with dyscalculia by the teacher of the class. In some cases one or more learning difficulties were co-existing.

The Learning Disability Association of Canada (2002) has also supported that learning disabilities and difficulties follow the child across the life span and are often correlated to under-achievement or achievement which demands high levels of effort and support. These disorders though are not connected to hearing and/or vision problems, socio-economic factors, cultural or linguistic differences, lack of motivation or ineffective teaching. These factors may also play an important role in the learning process of pupils with LD. Last but not least, LD may co-exist with various conditions including attentional, behavioral or emotional disorders. Handling individuals with learning disabilities requires a carefully planned program including early identification, specialized assessments and interventions involving home, school, community and workplace settings (Official Definition of Learning Disabilities, 2002).

LD being at the heart of special needs, remains one of the least understood and most debated disabling conditions that affect children and interest much researchers and teachers. The field of Learning Disabilities continues to be surrounded by intense and

often contentious, disagreements regarding the definition of the disorder, diagnostic criteria, assessment practices, treatment procedures, and educational policies (Lyon, 1994, 1995; Lyon and Moats, 1993).

People with learning disabilities are not a homogeneous group as they vary in the way they handle their difficulties and they present differential strengths and weaknesses. However, in terms of diagnosis and classification there are specific features and criteria set worldwide. There are three criteria for learning disability: (1) Significant impairment of intellectual functioning; (2) Significant impairment of adaptive/social functioning; (3) Age of onset before adulthood. (American Association on Mental Retardation, 1992; World Health Organisation, 1992 (ICD-10); American Psychiatric Association, 1994 (DSM-IV); Department of Health, 1998).

All these three criteria must co-exist at the same time in an individual in order to be considered to have a learning disability. “Difficulties in assessing adaptive/social functioning have contributed, in the past, to a tendency amongst clinicians to concentrate on assessment of intellectual functioning only. The assumption has been that, provided a significant impairment of intellectual functioning has been demonstrated, similar deficits in adaptive/social functioning are likely.” (British Psychological Society, 2000, p.4).

### **1.3.2 Dyslexia**

Dyslexia is one of the most discussed terms in educational research as it is one of the most common learning difficulties of school population worldwide. Dyslexia is a specific learning disability, even though the general LD category incorporates a wide range of disorders in listening, speaking, reading, writing, and mathematics. During the last decade it was recommended that the term learning disabilities, in order to describe reading difficulties, should be replaced by the term specific disabilities defined in terms of coherent and operational domains (Lyon et al., 2003).

In North America, the term ‘learning disability’ or specific ‘learning disability’ is preferred to the term ‘dyslexia’. In UK and Australia the most common term used is ‘specific



learning difficulty'. The term 'dyslexia' though continues to be used in research and by the public to describe this specific learning difficulty (Wearmouth and Berryman, 2009).

There exist many definitions of dyslexia which differ in the way that they approach this learning difficulty. 'Dyslexia is evident when accurate and fluent word reading and/or spelling develops very incompletely or with great difficulty. This focuses on literacy learning at the "word level" and implies that the problem is severe and persistent despite appropriate learning opportunities.' (British Psychological Society, 2005, p.18).

Other definitions have been given by the World Federation of Neurology, the International Classification of Diseases, 10th Revision (ICD-10), or the Diagnostic and Statistical Manual of Mental Disorders IV (DSM-IV). Another definition by Dr. Reid Lyon (1995), the Chief of the Child Development and Behavior Branch of the National Institute of Child Health and Human Development at the National Institutes of Health, follows:

"It is a specific language-based disorder of constitutional origin characterized by difficulties in single word decoding, usually insufficient phonological processing. These difficulties in single word decoding are often unexpected in relation to age and other cognitive and academic abilities; they are not the result of generalized developmental disability or sensory impairment. Dyslexia is manifested by variable difficulty with different forms of language, often including, in addition to problems with reading, a conspicuous problem with acquiring proficiency in writing and spelling." (p.19).

Definitions are numerous, depending on the review or the study conducted. The common point between the definitions is the notion that dyslexia involves a difficulty in learning to read; where the term reading could be defined as the process of extracting and constructing meaning from written text for some purpose (Vellutino et al., 2004).

Dyslexia is a learning disability that influences the way the brain processes written form material and is typically connected to difficulties in word recognition, spelling and decoding. Those diagnosed with dyslexia have difficulties with reading comprehension. It is important here to mention that dyslexia is not connected to lack of intelligence. The

effects of dyslexia could vary from person to person, but the common point among dyslexic people is that they read at levels significantly lower than typical for people of their age (Lyon,1995).

The main deficit theories concerning dyslexia are three: (a) the phonological theory (Blomert et al., 2004; Frith, 1997; Lyon et al., 2003; Shaywitz et al., 1999), this is by far the most researched and developed theory; (b) the cerebellar theory (Nicolson et al., 2001; Ramus et al., 2003); and (c) the magnocellular (auditory and visual) theory (Blomert et al., 2004; Heiervang et al., 2002; Pammer and Vidyasagar, 2005; Ramus et al., 2003; Stein, 2001).

The diagnosis of dyslexia faces many challenges and is influenced also by the lack of agreement regarding its definition. The most commonly used diagnostic tools are Development of Dyslexia Early Screening Test (DEST), Cognitive Profiling System (CoPS), Wechsler Intelligence Test for Children (WISC). It is crucial to recognize that dyslexia often co-occurs with deficits in attention (Shankweiler et al., 1995; Shaywitz and Fletcher, 1994), mathematics (Fletcher and Loveland, 1986), and/or spelling and written expression (Lindamood, 1994; Moats, 1994).

Dyslexic pupils can be supported by intervention programs either at school or at home in order to allow them to improve their reading and writing skills and more specifically linguistic coding, sublexical awareness and skills, visual coding, working memory and permanent memory) and metalinguistic processes (Vellutino et al., 2004). The success of any intervention program is focused prior diagnosis, which would allow the expert to select the precise program that would target an individual pupil's weaknesses (Given and Reid, 1999; Torgesen, 2000).

### **1.3.3 Dysgraphia**

Dysgraphia is a Specific Learning Difficulties (SpLDs) and it is described as a deficiency to write not only primarily in terms of handwriting, but also in terms of coherence (Chivers,1991). Dysgraphia has neurological roots and refers to writing

difficulties. "In children, the disorder emerges when they are first introduced to writing. They make inappropriately sized and spaced letters, or write wrong or misspelled words. Dysgraphia is characterized by wrong or odd spelling, and production of words that are not correct." ([www.ninds.nih.gov/disorders/dysgraphia.htm](http://www.ninds.nih.gov/disorders/dysgraphia.htm), 2011).

Dysgraphia is a biologically based disorder due to genetic and brain problems. More specifically, it is mainly a working memory problem, as the diagnosed individual fails to connect different brain regions that are responsible for writing. People with dysgraphia face difficulties in the automatic procedure which includes duplicating the sequence of motor movements required to write letters or numbers. (Berninger and Wolf, 2009b). The word dysgraphia comes from the Greek words *dys* meaning "impaired" and *graphia* meaning "writing by hand", so dysgraphia are a synonym for writing difficulties (Berninger and Wolf, 2009a).

The deficiency often co-exists with other learning disabilities such as speech impairment, attention deficit disorder (AD/HD) or developmental coordination disorder. In the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV), dysgraphia is characterized as a learning disability concerning written expression and always in line with the expected standards measured through intelligence and education. The DSM though does not clarify whether or not writing includes motor skills, orthographic skills and spelling (Nicolson et al., 2011).

There are at least two stages concerning the writing process. The first is the linguistic stage and the second one to the motor-expressive-praxic stage. The linguistic stage involves the encoding of auditory and visual information into symbols for letters and written words. The motor stage is where the expression of written words or graphemes is articulated (Roux et al., 2009). Dysgraphia is difficult to be detected as it does not affect specific ages, gender, or intelligence. The main difficulty is linked to the fact that often dysgraphic children present satisfying verbal fluency (Silingsman and Berninger, 2011).

Those diagnosed with dysgraphia may experience difficulties in everyday life with basic motor skills, such as tying shoes. Dysgraphia though does not affect all motor skills. People with dysgraphia often make basic grammar and spelling mistakes, such as

confusing the letters p, q, b, and d. They also often write the wrong word when trying to formulate their thoughts on paper. In general dysgraphia emerges during the first grades of primary school or sometimes in kindergarten, when the child is first introduced to writing (NCLD Editorial Staff, 2010). Dysgraphia should be distinguished from “agraphia”, as the latter is connected to loss of the ability to write resulting from brain injury, stroke, or progressive illness (Free Dictionary by Farlex, 2013).

Dysgraphia often co-occurs with other learning difficulties such as dyslexia or attention deficit disorder. There are three principal subtypes of dysgraphia: (a) dyslexic dysgraphia, (b) motor dysgraphia and (c) spatial dysgraphia. Some children may have a combination of two or more of these subtypes, and individual’s symptoms may differ in between as every person is unique. The most common type though is motor dysgraphia/agraphia as a result from damage to some part of the motor cortex in the parietal lobes (Berninger and Wolf, 2009; Silingsman and Berninger, 2011).

One of the less known aspects of dysgraphia though is that it may impact on the pupil’s emotional stability as almost no one can understand their handwriting, and they are aware that they under-achievers compared to their classmates. Emotional problems caused by dysgraphia include impaired self-esteem, lowered self-efficacy, heightened anxiety, and sometimes even depression (Berninger and Wolf, 2009; Silingsman and Berninger, 2011). Dysgraphic pupil may need to put in extra efforts in order to have the same achievements as their peers and they often feel disappointed as they do not meet others’ expectations (Silingsman and Berninger, 2011).

#### ***1.3.4 Calculating Disorders (Dyscalculia)***

Dyscalculia is usually perceived of as a specific learning difficulty for mathematics, or, more appropriately, arithmetics. The American Psychiatric Association (2013) defines Developmental Dyscalculia (DD) as a specific learning disorder that is characterised by impairments in learning basic arithmetic facts, processing numerical magnitude and performing accurate and fluent calculations. “These difficulties must be quantifiably below what is expected for an individual’s chronological age, and must not be caused by poor educational or daily activities or by intellectual impairments.” (British Dyslexia

Association, 2014). BDA also assumes that 5% of the UK's school population have 'mathematical learning difficulties'. Developmental Dyscalculia (DD) refers to the difficulty focused on numeracy skills. DSM-IV (1994) recommends that "mathematical ability, as measured by individually administered standardized tests, is substantially below that expected given the person's chronological age, measured intelligence, and age-appropriate education."

Developmental Dyscalculia has not been widely studied for many years (Gersten, Clarke, and Mazzorco, 2007). The most recent studies though have revealed that DD symptoms often vary among pupils and adolescents and this is why dyscalculic people are an heterogeneous group. Despite these differences though, there is a classification of typical symptoms of DD. The main difficulties of dyscalculic pupils are: (i) difficulty when counting backwards, (ii) poor sense of number and estimation, (iii) difficulty in remembering 'basic' mathematical facts, (iv) lack of recalling strategies, (v) difficulty in understanding place value and the role of zero in the Arabic/Hindu number system, (vi) no sense whether their answers are right or not, (vii) tendency to be slower to perform calculations as lack of use of mathematical procedures. These pupils are also less eager to take up tasks where they think they are likely to give a wrong answer and they often suffer from high levels of mathematics anxiety (American Psychiatric Association, 2013).

Children with DD often face difficulties in developing fluent fact-retrieval mechanisms and they end up employing procedural strategies while their peers long after their peers have progressed to memory-based strategies (Geary 1992; Geary, Hamson, and Hoard 2000; Jordan et al., 2003; Hanich et al., 2001; Landerl, Bevan, and Butterworth 2004).

In prior studies, two computerized training tools have been employed in order to assist pupils with DD. The first one called 'The Number Race' aims at improving the precision of numerical importance representations (Wilson et al., 2006). The second program, called 'Graphogame', practices the competency of comparing a set of objects. Both programs focus on the cognitive processes that are fundamental for developing mathematical skills (Räsänen et al., 2009).

Much future work though still needs to be done in the field of Development Dyscalculia in order to understand the relationship between basic competencies and higher-level

skills such as arithmetic that ultimately aims to enhance structured learning (Price and Ansari, 2013).

### **1.3.5 Attention Deficit Hyperactivity Disorder (ADHD)**

Attention deficit hyperactivity disorder (ADHD), that similar to hyperkinetic disorder in the ICD-10 is a neurodevelopmental psychiatric disorder (Kooij et al., 2010; Lange et al., 2010; Sroubek, Kelly and Li, 2013; Lange et al., 2010; Tucha et al., 2010). In ADHD there are significant problems like attentional and inhibitory control that are expressed as attention deficits, hyperactivity, or impulsiveness (Diamond, 2013; Childress and Berry 2012). The first symptoms begin approximately at the age of six, but they must persist for more than six months in order a child to be diagnosed with ADHD (Dulcan and Lake, 2012). The most common symptoms are inattention, hyperactivity and impulsivity. As symptoms vary between the different types the most common symptoms in accordance to the above mentioned types are:

- Inattentive type: attentional deficits, lack of focusing, lack of organizational skills and absent-mindedness
- Hyperactivity type: nonstop talking, difficulties in staying still, being always in motion
- Impulsive type: impatience, nervousness and clumsiness

(National Institute of Mental Health, 2008)

Younger children with ADHD may also face difficulties in playing silently, in waiting their turn or struggling to follow rules (DSM-IV, 1994). Furthermore, in school-aged pupils inattention symptoms often influence negatively their performance (Walitza, Drechsler, and Ball, 2012).

Referring to the gender differences, boys are more likely to be diagnosed with ADHD, as in general, boys are referred more often for behavioral problems, whereas it is more common for girls to have learning difficulties (Reid et al., 2000). Recent studies have shown that there is a high percent of girls with ADHD mostly inattentive type that are not diagnosed, as it is less obvious to parents and they are less likely to search for a

diagnosis (Bussing et al., 1998). Since special education programs are introduced in elementary and middle education, ADHD was believed to be a disorder that children overcome after puberty age. Statistical numbers though reveal that 50%-80% of children continue to have symptoms of ADHD well into adolescence but they may be capable of better self - control (Barkley et al, 2002; Steinhausen et al., 2003).

To conclude this short presentation of ADHD, its treatment requires an effective combination of counseling, lifestyle changes, and medications. Medications though are only recommended in children who have severe symptoms and are rarely considered for children with moderate symptoms that are not improved by counseling and expert help. Adolescents and adults though tend gradually to be capable of developing skills that make them functional in their everyday life (Gentile, Atiq, and Gillig, 2006).

#### **1.4 Linking Emotional Intelligence - Pupil Performance - Learning Difficulties**

This section will attempt to combine the three basic terms of the thesis: EI, Pupil Performance and Learning Difficulties, by presenting studies that have showed the links between them.

##### ***1.4.1 Linking EI to academic performance/success***

Academic achievement or (academic) performance is the education outcome that describes the extent to which a student, teacher or institution has achieved their educational goals. The most common measure of academic performance is examinations or continuous assessment. There is no general agreement though on the best way it could be tested or which of the aspects are most important (Ward, Stoker, Murray-Ward, 1996). Student achievement measures the academic content that a student supposed to learn in a specific amount of time. Each grade level has different learning goals and instructional standards that educators are required to teach. Standards are used to represent a 'to-do' list that teachers should follow. Thus, performance is measured according to these set standards (Carter and Welner, 2013).

So far there has been much research interest in academic performance, as good academic performance is undoubtedly a field of research at the heart of educational psychology. Results of these studies could also affect in lower school levels and specifically the way pupils' performance is assessed. Academic outcomes have created many difficulties to researchers, as prior literature has shown that academic achievement and academic performance have been influenced by variables such as family, school, society and motivational factors (Aremu et al., 2004). Likewise, Parker et al. (2004) noted that the majority of previous studies has focused on the impact of demographic and socio - psychological variables on academic performance.

Various researchers have conducted studies in order to examine the potential relationship between EI constructs and academic settings. Lam (2001) investigated the correlation between advanced EI and greater individual performance. Jaeger (2003) studied the impact of EI instruction on academic performance and the findings of his study supported the idea that a relationship does exist between EI and academic performance. In the same vein, Abisamra (2000) reported that there is a positive relationship between EI and academic performance. He therefore suggested that including a framework of EI within schools could have a positive influence on the curricula. Petrides, Frederickson and Furnham (2004) argued that any investigation of the potential effects of EI on academic performance should be examined in terms of a specific context. The majority of the research suggests that EI abilities lead to superior performance even in the most intellectual careers. Petrides, Frederickson and Furnham (2004) assumed that EI abilities were four times more important than IQ concerning success at the workplace and prestige.

There is an important number of studies suggesting that as a measured construct, EI could predict performance in educational and organizational settings (Goleman, 2003). There have indeed been a number of studies demonstrating the predictive effects of EI on academic achievement (Adeyemo et al., 2007; Marquez, Martin, and Bracket, 2006). On the contrary there is some research that found limited relationship between EI and academic performance (Corrie, 2003)



Swart (1996) conducted a study conducted on 448 university students in South Africa that indicated there is a significant difference in Emotional and Social Intelligence (ESI) between successful and unsuccessful students (Bar-On, 2006). Furthermore an additional study conducted on a sample of 1,125 university students in the U.S.A had similar findings. "In both studies, the more successful students were found to be the more emotionally and socially intelligent. More specifically, the ability to manage one's emotions, to be able to validate one's feelings and to solve problems of a personal and interpersonal nature are important for being academically successful; additionally, academic performance appears to be facilitated by being able to set personal goals as well as to be sufficiently optimistic and self-motivated to accomplish them." (Bar-On, 2006, p.14-15).

Zeidner et al., (2002) previously has pointed out that there has been limited number of studies in order to allow researchers create an overall image concerning the impact that EI may have on academic success. Research up to today has provided conflicting findings regarding the relation between EI and academic success. But by contrast there is a limited number of studies that have shown limited or lack of relationship between EI and academic performance (Newsome et al., 2000; Sutarso et al., 1996). It is important here to mention that research using the Mayer, Salovey and Caruso EI Test (MSCEIT) has not found any correlations between EI and Grade Point Average (GPA) (Bastian, Burns, and Nettelbeck, 2005; O'Connor and Little, 2003). On the contrary, the results from some other studies that used the Bar-On's EQ-i measure of EI (O'Connor and Little, 2003; Parker et al., 2004) observed correlation between overall EQ-i scores and GPA.

Specifically, Parker et al. (2004) found significant correlations between three subscales of the EQ-i (stress management, adaptability, and intrapersonal abilities) and GPA at the end of the first year of college. However, overall EI scores, as measured by the EQ-i, did not correlate to GPA. Not all researchers though have observed correlations between academic performance and scores on the EQ-i. Newsome, Day, and Catano (2000) study, who used the EQ-i as a measure of EI, has found no correlation between academic performance and EI. On the contrary they found correlations between EI and personality facets. Petrides et al. (2004) using the measures by GPA examined the role

of trait EI on academic performance in students with low IQ compared to those with high IQ. Results of their study have revealed that trait EI correlated to academic performance, but only in students with low IQ scores. Specifically, the high trait EI was more beneficial for academic success to students with low IQ. Woitaszewski and Aalsma (2004) examined the relationship of EI and academic success in gifted adolescents and their study revealed similar findings, as EI did not predict academic success also in this sample (Malekar and Mohanty, 2011).

Such studies seem to provide some controversial evidence concerning the relationship between EI and academic performance. Preliminary studies though showed the importance of this relationship, particularly for “at risk” students. More studies should be conducted in this area in order for an in-depth assessment to be made regarding the ‘strength’ of this interrelationship.

#### ***1.4.2 Linking EI to Pupil Performance***

In 1995, international attention was drawn to the link between educational success and emotional and social competency (Goleman, 1995). He suggested EI (EI) was more important than IQ in predicting success in life and in academic level (Parker et. al, 2009).

Despite the fact that a study conducted by Newsome et al. (2000) did not reveal a statistically significant relationship between EQ-i scores and performance at school, four other major studies conducted on large samples in South Africa, Canada and the United States (Bar-On, 1997a, 2003; Parker et al., 2004; Swart, 1996) have shown that there is a relationship between EI and Pupil Performance (Bar-On, 2006). Furthermore these studies have supported the idea that Bar-On model is a valid tool which could predict an individual’s performance. Results from an analysis conducted by James Parker and his colleagues on 667 Canadian high school students (2004), have revealed that the correlation between ESI and scholastic performance was statistically high. This means that a high percent of performance is the result of the interaction of emotional-social intelligence and cognitive intelligence.

“Despite the acceptance among many educators that EI is important for the success of school- aged children, there is limited direct research investigating the link between EI and academic success at the elementary school level.” (Parker et al., 2009, 240). One such study conducted by Eastabrook, Duncan and Eldridge (2005) provided some evidence for the importance of EI among primary school children and in particular between 7-12 years. They asked 72 elementary school children to complete the youth version of the Emotional Quotient Inventory (EQ-i: YV; Bar-On and Parker, 2000) at the beginning of the school year (September), whereas their scores were compared to their performance records at the end of the school year (June).

Another study conducted in 2014 (NakhoshtRavan et al., 2014) investigated the influence of teaching EI (EI) on the academic performance in female students of primary schools in Ahwaz, Iran. The sample of the study has been 60 female students who recognized to have behavioral disorders (BD) were selected beside to 30 students without behavioral disorders. The results of that study revealed that teaching EI influences on increasing academic performance. This result also matches the results of studies conducted by Fatum (2008), Hogan et al. (2010), McCann et al. (2011), Jiwen Song et al. (2010), Laborde, Dosseville and Scelles (2010), Malekar and Mohanty (2011), Brackett, Riverz, and Salovey (2011) and Ferrando et al. (2010). Furthermore, another recent study conducted by Brouzos et al. (2014) in a sample of primary pupils (8-10 years old) has also revealed that trait EI was positively correlated to pupils attainment.

A current pedagogical experiment (Rafaila, 2015) focused namely on the ability of primary school students to identify basic emotions, based on a correlated interpretation of all the emotional expressions; facial expressions, gestures, postures, tones of voice. The pedagogical experiment implemented a training program focused on exercising the analysis of certain emotional expressions, the emotional charging and discharging, the play-role. The sample of the study was 30 first-grade pupils in Buzau, Romania. According to this study, the pupils of the sample have been able to distinguish precisely between positive and negative emotions. Here though it is important to mention that pupils could not distinguish among the several negative emotions, as all the pupils have considered them to be sadness.

These findings support the idea that EI is an important predictor of the academic success of students as young as 7-12 years of age (Parker et al., 2009). Results of this research could appeal also to my sample, as the focus group is also at the age of 9-10, even if these researchers have employed different research tools.

The above studies indicate a relation between EI and pupil performance. This thesis is undoubtedly influenced by former studies that shed light on different aspects of EI and link these either with measured performance (scores) or with the improvement of the attainment that pupils indicated. The majority of these studies though have been conducted with much larger samples than mine and they have followed different analysis methods. The current study differs from these studies in providing an in-depth analysis of the components of EI of the pupils of the sample. Furthermore a crucial difference is detected in the research tools that have been used as the above mentioned studies have been mostly quantitative ones and they have employed tools like EQ-I Inventory whereas my tools included observations, qualitative questionnaires and face-to-face interviews. Last but not least, the key difference of my study compared to the former ones is the variable of specific learning difficulties -that constituted the sampling criteria. The current study aims to explore this triangle of concepts, in order to uncover to some extent the possible links between them.

### ***1.4.3 Relation of EI to Learning Disabilities***

Students with learning disabilities (LD) have familiarized with academic difficulty and failure. It is a common phenomenon that in cases pupils with LD face cognitive challenges they exhibit behaviors related to learned helplessness, including diminished persistence, lower academic expectations, and negative affect (Baird et al., 2009). Various studies have so far described the social difficulties that these students face especially in higher education as they have not had the appropriate academic skills or suitable academic strategies (Frazier et al., 2007) and they suffer from poorer time management skills, and deficient test taking strategies (Reaser et al., 2007).

Considering one of the hypothesis of the study of Narimani et al. (2009) showed that there is a relationship between EI and behavior disorders. More specifically the results of this study have shown that the higher the EI, the less the behavior disorders.

Findings of this study are consistent with the findings of Taghavi et al. (1999) and Cicchetti and Toth (1998) in terms of the co-existence between behavior problems, communication limitations and not tolerating failures all of which are strong indicators of low EI in children with learning disabilities. According to the results of this study pupils with disabilities or anxiety disorders have shown lower levels of EI compared to their classmates without disabilities. Thus, it can be said that dyslexic children compared to non-dyslexic children have more behavior problems and indicate lower EI. It could be then assumed that EI is one of the factors which affect anxiety levels, as children with lower EI show worries and less effective and determined conversational behaviors (Wojnalower and Gross, 1998).

Further studies determined that LD students reported higher levels of stress and anxiety, lower academic self efficacy, greater lack of self-confidence and self-doubt, and extreme self-criticism compared to non-LD students (Sparks and Lovett, 2009). Several other studies that explored self efficacy and other social and emotional components in LD students found that college students with and without LD are relatively similar in most social-emotional abilities but differ in stress management abilities and in needs for social support systems. Another study that explored the coping strategies of students with LD indicated that although students without LD were more task orientated and perceived more support than students with LD, students with LD used more emotional coping strategies than non-LD students (Heiman and Kariv, 2004b). Very few studies have explored EI in LD students, suggesting that a clear profile has not yet emerged (Reif et al., 2001).

Most recently, Klassen and colleagues (2008) report on two research studies that explored the relationship between academic procrastination and self efficacy for self-regulation in 208 undergraduates with and without LD. Their findings indicated that individuals with LD reported significantly higher levels of procrastination than those without LD. They suggested that academic self-efficacy is key to understanding academic procrastination in adults who have knowledge of cognitive and metacognitive skills and strategies but may possess lower confidence to use them to organize their learning.

Following the findings of Heiman and Kariv (2004b) that LD students tend to use social-emotional strategies more often to cope with their academic difficulties than non-LD students and other findings that suggested the significance of teaching emotional strategies for LD students in higher education (Dahan et al., 2010) and the need for multidimensional support programs to strengthen LD students emotional as well as academic abilities (Gregg, 2007).

Based on the above-reviewed literature, it is assumed that EI, which is considered a self-related variable, is associated with learning difficulties. Studies have shown that higher levels of EI may mean fewer behavior disorders. It is clear that EI affects drastically the wide range of learning difficulties.

### **1.5 Summary and Aims of the Research**

The greatest part of the above literature has been dedicated to EI, its definitions, theories and models. Three main models of EI have been presented so far in the literature chapter. The first model introduced by Peter Salovey and John Mayer, perceives E.I. as a form of cognitive abilities. The second model, by Reuven Bar-On, presents EI as a mixed intelligence which includes cognitive ability and personality aspects and the third and last model, introduced by Daniel Goleman, also perceives E.I. as a mixed intelligence but it differs from the latter model as it focuses mostly on how cognitive and personality factors determine workplace success. Research has found though that the three models are significantly correlated (Stys and Brown, 2004).

Although EI has been defined in many ways which also lead to various theories, the present study has been focused on the four-branch model by Mayer and Salovey (1997), which characterizes EI as a set of four related abilities: perceiving, using, understanding, and managing emotions. Even if this model is not considered a recent one, it incorporates the wide range of emotional skills to form the bigger concept of EI in the individual. Furthermore, a great part of the studies conducted in the field of EI are based on this model and incorporate its aspects, a fact that strengthens its validity.

Regarding the construct of Pupil Performance, it is discussed as the ability to remember and use facts and it also relates to initiative, self-reliance, leadership potential and self confidence. Pupil performance involves a big variety of capacities in order a pupil to be considered as well – performing. In the case that this pupil also faces learning difficulties like dyslexia, dyscalculia or AD/HD then performance is often . Although there is limited number of studies investigating the link between EI and pupil performance at the elementary school level, major studies have so far clearly indicated that a statistically significant relationship between EQ-i scores and performance at secondary school and college exists.

The initial aim of this study, therefore, is to find this potential link between EI and Pupil Performance in primary school pupils and to investigate the relation between these two concepts specifically in pupil populations with learning difficulties. *So far no studies have explored the relation between pupil performance and EI in such populations, particularly at the primary school level.* This significant gap in the literature was the incentive to investigate if and how EI affects pupil performance with learning difficulties.

Moreover the investigation aims also to explore how its results might affect current curricula in integrating interventions that aim to develop EI in pupils with learning difficulties. The second aim of the study is thus to suggest a framework of concern referring to the way that the concept of EI may be integrated within the Greek curricula, special emphasis should be given to the following. The last two decades EI has been the focus of school curricula development via Socio - Emotional Learning Programmes. As in the last years social and emotional competencies are considered to play a more significant role in performance compared to IQ (Ehmke, Siegle, and Hohensee, 2005), school-based programmes of social and emotional learning (SEL) therefore could help young people develop these skills that will lead good academic progress (Fan and Chen, 2001). These programs have indicated an enhancement of the school environment and also helped students and families who may feel difficulties in building relations with teachers and peers to feel more comfortable and ultimately become active members of the school community .

## **CHAPTER 2**

### **METHODOLOGY**

This chapter focuses on the methodology of the current study. More specifically it introduces the Research Questions and subsequently presents the Method of the study, the Research Tools, Sampling and the Research Procedure that is divided in three subsections: the Pilot study, Access to School and the Timeline. A review of the Analysis procedures using the NVivo software follows and the chapter closes with a review of Ethical issues and a short summary which brings together the main points presented.

#### **2.1 Research Questions**

The present study sought to investigate if and how EI affects pupil achievement as evidenced in one classroom of primary school children with learning difficulties.

Specifically the research questions raised were:

- a) In what ways is EI a contributing factor to pupil performance in populations of children with learning difficulties?
- b) What are the main features of a framework of concern regarding the way the concept of EI may be integrated within the Greek primary school?

#### **2.2 Method**

The research method of the current study is the case study. The case study method was selected for the current study as I aimed to study a particular phenomenon (the link between EI and school performance/achievement) within a particular context (a classroom of students with LD attending a private primary school). The units of analysis



more specifically were individual pupils with learning difficulties and these were studied within the context of a primary school classroom in a Greek private school.

Case study methodology is considered as the most suitable one for descriptive and explanatory research and additionally it is widely accepted in social studies (Eisenhardt, 1989; Lee, 1989; Miles and Huberman, 1994; Yin, 1994, 2003a).

Stake (2000, p.436) noted that a "case study is both a process of inquiry about the case and the product of that inquiry". Case study is considered as one of the most valuable studies for qualitative studies (Crotty, 1998; Creswell, 1998, 2003; Denzin and Lincoln, 2005; Guba and Lincoln, 1981; Mertens, 2005; Hatch, 2002; Patton, 1990).

Three writers have written in detail about the case study methodology: Merriam (1998), Yin (1981; 1999; 2005), and Stake (1994; 2005; 2008). According to Yin (2003b), the case study strategy consists of the following components: the study's questions, the units of analysis, the linking of the units, the data to the propositions, and the criteria for analyzing the findings. The case study strategy includes "the ability to ask questions, to be an active listener, to be able to adapt to unforeseen circumstances, to grasp the issues being addressed, and to identify personal bias" (Brown, 2008, p.4.). In 1984 he wrote that case study is "the preferred strategy when 'how' or 'why' questions are being posed, when the investigator has little control over events, and when the focus is on a contemporary phenomenon within some real-life context" (p.1). The present study focuses on the ways in which EI affects pupil performance is particularly suited to case study methodology in that it aims to study in-depth a phenomenon from a range of perspectives using multiple sources of evidence.

Here we could mention that there are indeed some limitations when using the case study method. One of its drawbacks should be considered the objective reporting and lack of generalisation (Eisenhardt, 1989; Yin, 1994). Furthermore, the researcher's bias can lead to a lack of precision (Yin, 1994). One effective technique to reduce this negative influence, is the use of multiple sources of evidence in the form of three data collection tools; detailed triangulation from these multiple sources, and an attempt to

provide a *theoretical* generalization of the findings, suitable for the small sample this study employs.

The current study additionally employs the multiple-case or cross-case study strategy that allows the researcher to explore the potential links between the variables that are too complex to be examined by a single survey (Yin, 1994). In this way, this study is able to include the voices of multiple cases in order to build a tentative theoretical framework (Research Question 2) on the study's main theme, EI and pupil performance.

## **2.3 Research Tools**

The choice of the research tools aimed at case study triangulation in the following way. Observation protocols were firstly used to provide the contextual evidence and data on specific behavioural categories obtained from the review of the literature. Subsequently, the questionnaires allowed an exploration of further themes that were not entirely observable, such as self-esteem and ensured that the pupils' voice and own perspectives were included in the study. Finally the interview delved deeper into the key themes of the study and provided more detailed information on the ways in which pupils' performance is affected by EI from the pupils' point of view.

### **2.3.1 Observation Protocols**

Observation protocols were employed during the first phase of the research in order to provide a description of pupil's EI within the classroom environment. The necessity of observational data is dictated due to the fact that in case that someone attempts to objectively assess another person's EI behavioural evidence is required that would provide all the data concerning the subject's behavioural aspects (Goleman, 1995). Reliability was assisted by using an EI observation record sheet assessing emotional competencies, adapted from the Table of Emotional Handling. The ABC table includes the following aspects:

- **Antecedent-** The events or circumstances that preexists a behavior
- **Behaviour-** The behaviour
- **Consequences-** The action or responses that follow the behaviour

(Pence et al., 2009; Pratt and Dubie, 2008)

To be more accurate, the aim of the aforementioned table was to elicit contextual data concerning the following categories: Emotional Perception, Interpersonal abilities, Emotional Expression, Trust in abilities and knowledge, Self-esteem, Reaction to verbal reprimand, Openness to Success and Failure, Emotional Distraction, Intrinsic Motivation for Participation, Self-control in addition to contextual data. The categories referred to EI are in accordance to the four branches model of Mayer and Salovey that was presented in Chapter 1: Emotional Perception, Facilitating thought, Understanding emotions and finally Managing emotions. The contextual data referred to sub categories shedding light on various aspects of the main categories.

I attempted to approach these terms through separating them into questions. For example the term Emotional Expression has been represented in the current table through the following questions: (a) Does the pupil fail in expressing his anger, either physically or verbally, even if the impulse would normally cause that feeling? (b) Does the pupil feel extremely scared? (c) Does the pupil have constant fears? (d) Does the pupil seem to be passive, weak or upset? (e) Does the pupil have frequent or even extreme mood changes?

In the protocols these categories were represented through the following questions:

- Does the pupil perceive emotions in self and others?
- Does the pupil cooperate with classmates during a team activity?
- Does the pupil react in an appropriate way to different situations or not?
- Is the pupil confident about his/her knowledge and abilities?
- Is the pupil over-confident about his/her knowledge and abilities?
- Does the pupil accept success?
- Does the pupil accept failure?
- Does the pupil stop trying in case that he/she does not accomplish at first an activity?

- Does the pupil accept failure?
- Does the pupil try to give a good impression of self to others?
- How does the pupil react to verbal reprimand?
- Does the pupil control his/her anger?
- Does the pupil fail to express anger even though the incentive would cause anger?
- Does the pupil's mood change rapidly?
- Does the pupil shout often without obvious reason?
- Does the pupil get emotionally distracted when teaching is interrupted?
- Does the pupil control him/herself?
- Does the pupil comply with classroom rules?

The observation protocol can be found in Appendix no. 1, section 1.1.

Observations were conducted during Language and Math classes subjects. This choice was conscious as during the teaching of these subjects pupils seem to be more active and eager to participate, according to their teachers and therefore I could collect a greater variety of data so as to explore the relationship between EI and Pupil Performance. Most importantly for the current study,, during these subjects pupils were more often assessed compared to other for their performance (tests, activities, questions) compared to others.

### **2.3.2 Questionnaire**

The questionnaire is one of the most commonly used research tools for data collection (Wilson and McLean, 1994). Both open and closed questions are employed in questionnaire design. In the current study, open-ended questions had the advantage that they allowed the participants to provide a more complete response by providing the opportunity for them describe their opinions and thoughts. Their strong point is that they mostly provide specific and meaningful information (Arhar, Holly, and Kasten, 2001; Patten, 1998). An important asset of questionnaires is that they retain confidentiality through anonymity. This fact makes them an effective tool for collecting data on sensitive activities. (Patten, 1998; Salkind, 1991). In the current study, this anonymity

was facilitated through a particular way. Questionnaires were handed out to the whole class. Questionnaires with a special sign though were given to the pupils that would form part of the sample of the study, e.i a star for Stratos, a moon for Yiannis and so on. In that way I could track their questionnaires while retaining their anonymity.

The questionnaire in the current study (found in Appendix 1) was based on several recent studies (Adeyemo, 2005; Ohio University, 2003; Petrides et al, 2006; Shipley et al., 2010; Wong et al., 2001) that have investigated EI in correlation with personal and school facets. The questionnaire of the current study has been based on the above mentioned studies. More specific, the studies of Adeyemo, Petrides and Shipley have been employed to elicit the main categories of the questionnaire whereas Wong's have been the template for posing the questions of each questionnaire's section and the Youth Deployment Activity Guide of Ohio University has provided the basis of creating the graphics of the questionnaire. Additionally, elements of the activity handbook of Promotion Program of Psychological Health and Education (2008) have been used in order for the questionnaire to cover the wide range of EI and form the final sections.

These sections include Emotional Perception and Appraisal, Emotional Understanding, Emotional Facilitation of thought, Emotional Management, Intrapersonal and Interpersonal Skills. Each section is further divided into sub-skills, that address such things as Problem Solving, Happiness, Flexibility and other critical emotional and social skills and competencies.

In the current study, a 6-page questionnaire was administered to the students in order to understand their feelings, put them in writing and help them discover that different situations lead to different feelings. The questionnaire contained illustrated short stories that would appeal to the age of the children and would depict everyday dialogues. Children were asked to step in the "protagonists' shoes" in order to recognize their feelings, find the hidden ones and discover the influence of other people towards them regarding emotional handling (Promotion Program of Psychological Health and Education, 2008).

The majority of the activities included in the questionnaire have been based on a program conducted by the Center of Research and Applied Studies of the University of

Athens, Department of Philosophy, Psychology and Pedagogy, Psychology Laboratory, that promoted psychological health and learning in schools (2008) with the exception of the first activity, as it is mentioned below. These activities were part of an extended guide that proposed a special framework to teachers and school psychologists working with children from 8 to 12 years old, in order to promote the emotional development of their pupils. Activities were divided in different sections such as communication skills, recognition and appraisal of emotions, self-esteem, stress confrontation, problem and conflict solving, supporting children in crisis situations and activity books for pupils.

Some of these activities (five) were selected to be incorporated into the research, as they included illustrated pictures, which set clear the content of each activity, they covered a wide range of potential emotional situations according to the four branch model of Mayer and Salovey and were supported by the literature review, which helped to interpret the pupils' responses. As these activities were planned to be a part of teaching in school, it was essential for the study to introduce some changes. These changes did not refer to the content of the activities but to the extension of them. Pupils had forty minutes at their disposal to complete all the activities so it was impossible to create a questionnaire that was more than five pages long. Before administering the questionnaires to the participating pupils, they were piloted on a sample of 10 pupils (described below in the Research Procedure section).

The design of the questionnaire had a twofold aim; To elicit a wide range of data concerning EI and appeal to the interests and the age of the pupils. Based on the Ohio's University guideline for pupils 8-10 (p. 6) the first activity of the questionnaire included the "emotional carpet" in order to explore pupils' Emotional Perception. The next activity (Activity 2) was employed to investigate pupils' ability to distinguish honest and dishonest/hidden feelings and has been found at the activity handbook of Promotion Program of Psychological Health and Education (p.26-27). The prototype though included four dialogues whereas in the present questionnaire has been used only four of them due to time consuming reasons. Furthermore by the end of this activity a small new section was added where the pupils were asked to fill out with personal experiences concerning this branch of EI. The third activity aimed at investigating Emotional Understanding in terms of associating emotions to events and circumstances and was based on p.37 of the activity handbook. The fourth activity's

prototype -aimed at investigating pupils' self-esteem and self-image- is found in p.54-55 of the aforementioned handbook. The current questionnaire though differs from the prototype in the questions posed that follow the initial table with merits and demerits. To be more specific, the first question right after the table is enriched by "Was it more difficult to find out your strong or your weak points?" and "According to your opinion why did this occur?". Furthermore the third question of the prototype has not been included and it has been replaced a small happy face encouraging the children to delve into their self-image. The last activity (Activity 5) has been exactly the same as the prototype's one (p. 51) with the exception of the last part, referred to interpersonal skills, where only three of the sentences included in the prototype have been used, in order not to collect data that could not been used in the analysis section. An analysis of the five activities of the questionnaire follows.

The first page of the questionnaire (Activity 1) depicted a grandmother with a big colorful carpet and children were asked to draw different faces showing various emotions without explaining in words their drawings. This section examined their ability to recognize different emotions.

In the second section (Activity 2), the children were given four different illustrated pictures with dialogues taken from everyday life. Pictures were accompanied with a short text: "In the following pictures something seems to be wrong. Can you spot what it is?". Dialogues included were the following:

1. Mum and I bought you this. Do you like it? - Yes, yes, a lot!
2. Ah! I'm very glad Mary finally won in the running competition and got the medal!
3. You don't mind that your cousin took your magazine without asking you, do you? - No, no, aunt! Don't say that!
4. What are you talking about? I'm fine! Don't you see? - Are you sad with your grade at language?

In all the situations the protagonists were hiding their real feelings. The aim of this activity was to encourage the pupils to discover what the real thoughts and feelings of the protagonists were, although they were not expressed with clarity and in an obvious way.

The following section (Activity 3) was devoted to children's ability to link emotions with different personal experiences that they had so far in their lives. Emotions varied from positive to negative as well as from neutral to more intense, so that they included sadness, joy, regret, fear, surprise, fear, shame.

The last section (Activity 4) of the questionnaire was related to children's self-esteem and self confidence as they were asked to find out their merits and demerits and furthermore they were asked which one was easier to them and why.

In the same vein, the very last page (Activity 5) of the questionnaire aimed to at eliciting the dimensions of the pupil's self-esteem. The children were asked to fill in sentences which referred to the pupils seating next to them. This part of the activity aimed at investigating the emotional appraisal of the pupils concerning other people and especially their nearest classmate.

### **2.3.3 Interviews**

The observational data was triangulated with semi-structured interviews with the pupils. These were audio-taped, transcribed and analysed using NVivo software for qualitative data analysis (see Analysis section). They built on the observational data in shaping a socially-constructed understanding. Children differ significantly from adults regarding cognitive and linguistic development and in attention and concentration span (Arksey and Knight, 1999). The interviews were designed so as to draw out pupils' recollections of their feelings and reactions during the observed lessons (prompted by the written feedback sheets they received after the observations) and their subsequent views about the value of formative assessment of student EI.

The pupils were interviewed in groups to allow participant reaction to and comparisons with what others said. Groups were created after consent by teachers in order to ensure that children would feel at ease and answer questions spontaneously. Groups were small, in accordance with Lewis (1992), who summarizes research to indicate that a group of around two or three is an optimum size, though it can be smaller for younger children. The duration of the interview was no longer than fifteen minutes and I ensured that distractions were kept to a minimum. I also used simple language that was to the



point and without ambiguity (e.g. avoiding metaphors). As mentioned, the interviews were conducted in groups. Lewis (1992) assumes that group interviewing help children to express their ideas and introduce new ones in the discussion. An effort was made to introduce it as a game in the current study.

Thirteen questions were included in the interview schedule. In the first phase of the interview children were asked introductory questions such as “Which of the school subjects do you think you are best at?” and “Are you happier when you attend Language or Mathematics?” These first two questions aimed firstly at making pupils feel at ease and allowed access to an initial general impression of their self-esteem and the way they see their school performance.

Subsequent questions were more specific and children were given more time to respond. Questions aimed at investigating the relation between EI and their performance by using easily understood and targeted wording; they were also carefully planned after the observation phase of the study. The aim was to elicit more information about each pupil for both his/her EI and performance. As the interviews were the last part of the study it was attempted to gain further depth of knowledge regarding children’s emotional appraisal, empathy, emotional perception, limits of abilities, self-esteem. Questions included both pylons of the study: EI and pupil performance.

## **2.4 Sample**

The study was conducted in a private school, which was selected because of its openness to new pedagogic tendencies. The fourth grade of primary school was selected after meeting with the head of the school and the teachers and determining that it was attended by a large number of pupils (n=26) and, crucially, that a high percentage of them were diagnosed with learning difficulties.

The sample was a group of 13 students of mixed gender coming from both classes of the fourth grade, and being between the ages of 9 & 10 years old with LD. It was determined that at this age the children have the ability to express more accurately their feelings and they had also learnt through others or discovered on their own ways to manage them (Saarni, 1998). Furthermore, they have already attended intervention

programs and they have learnt to deal on a satisfying level with their learning difficulties.

Thirteen (n=13) Greek primary school students (9 boys and 4 girls) with learning difficulties (LD) were selected with the following particular criteria:

- They were diagnosed with one or more LD by an authorized Greek institute.
- They were 9-10 years old (fourth class of primary school).
- They were attending at least a 2- year intervention program either at school or at home.

The pupils have differed a lot regarding the LD that they faced and the severity of them. Furthermore the thirteen pupils of the sample varied from low performing to high performing and often had unstable performance either on Language or Mathematic subject. Below I present a brief account of the educational history of each one of the thirteen pupils, who will be presented thoroughly in the Findings Chapter, classified with reference to their LD.

**Table 2.1: Short description of the pupils of the sample**

Pupil	Brief account	Learning Difficulty
Anastasia	A low performing pupil with dyslexia and poor mathematical skills. Her low self esteem had a negative impact on her performance.	<b><u>Dyslexia *</u></b>
Andy	Average performing pupil with reading deficits and mathematical disorders. She has indicated high openness in success and failure.	
Angelos	A low performing pupil with severe	

	Dyslexia focused on poor written skills, which affected his performance especially in cases of exams.	<b>(reading, listening, writing, spelling, difficulties)</b>
Annika	Pupil diagnosed as “slow pupil” with severe lack of language mathematical skills. Lack of participation in class, asking concretely for reinforcement by the teacher.	
Eleanna	Pupil diagnosed with dyslexia focused on reading difficulties. She has indicated strong self-esteem and trust in abilities and knowledge.	
George A.	Pupil diagnosed with Dyslexia and received an intervention program which helped him cope with his learning difficulty. Competitive pupil with high intrinsic motivation.	
Petros	Pupil with Dyslexia referring to listening and reading difficulties. Low participation in class and intrinsic motivation. He was also partially diagnosed with dysgraphia.	
Stratos	Pupil with high function autism, dyslexia and dysgraphia. He has indicated to have a strong relationship with the teacher, a fact that seemed to impact his performance.	
Constantis	Pupil with writing deficits and dyscalculia. Better performing in	

	Language than Mathematics. He received much help by the teacher and he have shown improvement.	<b><u>ADHD</u></b>
Dimitris	High IQ pupil , high performing, diagnosed with ADHD. Over self confident, often not complying with classroom rules and as a result, receiving teacher's negative comments.	
George K.	Pupil with ADHD, average performing, difficulties in coping with stress and control himself.	
Vasilis	Pupil diagnosed with ADHD combined type. He had created the image of a "bad and disobedient boy" with partial lack of self-esteem.	
Yiannis	Pupil with ADHD combined type and poor reading skills. He faced difficulties with controlling his self. He has also indicated a misleading self image.	

**\* Some of the pupils of the sample had except dyslexia, other learning difficulties like dyscalculia or dysgraphia.**

## **2.5 Research Procedure**

### ***2.5.1 Pilot study***

As a new researcher and prior to getting access to the school, all the tools of data collection (questionnaires and interview questions) were tested, using a sample of 17 children with learning difficulties that were conveniently sampled from my own cohort of students that I teach and were about the same age as the main study's sample. During

this pilot phase corrections were made regarding the syntax or language of the text and questions, some were removed and some sections were added in the questionnaires.

More specifically, in the initial questionnaire there were six activities. One of them was called “The magic mirror” that asked pupils to complete a picture of the mirror which referred to the way they saw themselves in comparison to the way that other people saw them. This section of the questionnaire was not been completed by the majority of the pilot study sample (15 pupils). After inquiring of the pupils their difficulty to complete this section, they said that they could not understand what they should do. After this I decided to remove this section of the questionnaire, as it was deemed too challenging for the pupils of this age to complete.

Concerning the observation protocols the pilot phase was essentially the first week of the main research. It was at this time that the format of the table was changed slightly: the observation categories were written in shorter sentences and space was also left for field notes which were deemed necessary for commenting on the overall context of the sessions.

### ***2.5.2 Access and Entry to School/classroom***

Access to the school was permitted by the Head of the school, who also provided permission to enter classrooms in order to conduct the research. During our initial meeting the aim and the objectives of the study were made clear to him. He was also informed about the nature of the population I wished to work with and the research tools. As he gave his consent to conduct the study in the school, we arranged a separate meeting with the two teachers of the fourth grade in order to inform them and make sure that I will not harm or affect teaching in an inappropriate way. During this meeting teachers insisted on asking questions about the ways that study would firstly guarantee anonymity and secondly guarantee that pupils of the sample would not feel marginalized or stressed at any stage of the study. After extensive conversation, I was given consent to begin data collection. The following day, a detailed e-mail was sent to both the Head and the teachers with the timeline of the study and the research tools

that would be used in all the phases of the research. Consent forms were then sent out to the pupils' parents (see Ethics section below).

### **2.5.3 Timeline**

The duration of the study was eleven weeks divided into three different stages according to the research tools that were used during each stage. In the first stage (4 weeks) classroom observation protocols were used in order to start observing the behavior and emotional reactions of the sample. By end of this period, separate interviews with the two teachers had been conducted and important information had been collected aiming on the one hand at creating a self portrait of each of the pupils in the sample, and on the other hand at understanding the way class is working and in particular the way pupils were involve in the learning procedure.

In the second stage (4 weeks), observation protocols continued being used in order to collect adequate qualitative data for analysis. By the end of this period (the last week), questionnaires had been given to the pupils to collect specific data concerning EI and performance competencies.

The last phase of the study (3 weeks) included interviews with the thirteen pupils of the sample, which allowed me to collect in vivo qualitative data from the spontaneous answers to the questions raised. This concluded the research procedure.

The research followed the timeline below:

**Table 2.2: Timeline of the research**

<b>Stages</b>	<b>Weeks</b>	<b>Research Tools</b>
<b>1<sup>st</sup> Stage</b>	1 <sup>st</sup> Week	(Pilot Study) Observation Protocols
	2 <sup>nd</sup> Week	Observation Protocols
	3 <sup>rd</sup> Week	Observation Protocols
	4 <sup>th</sup> Week	Interviews with the teachers

<b>2<sup>nd</sup> Stage</b>	5 <sup>th</sup> Week	Observation Protocols
	6 <sup>th</sup> Week	Observation Protocols
	7 <sup>th</sup> Week	Questionnaires
	8 <sup>th</sup> Week	Questionnaires
<b>3<sup>rd</sup> Stage</b>	9 <sup>th</sup> Week	Interviews with the pupils
	10 <sup>th</sup> Week	Interviews with the pupils
	11 <sup>th</sup> Week	Interviews with the pupils

## 2.6 Analysis

For the analysis of the qualitative data I used NVivo trial version downloaded from [www.nvivo.com](http://www.nvivo.com). By using the NVivo qualitative analysis program all data was more efficiently and systematically coded under different ‘nodes’. The nodes of the analysis were constituted of two different categories depending on whether they were connected to EI or pupil achievement. These codes came either from Mayer and Salovey’s four branches of EI (1997) or were related to definitions and theories of pupil achievement mentioned above. Below the two tables describe the codes that have been used for the analysis.

Based on the two significant pylons of the research, EI and Pupil Performance I chose to have a broader perspective of the case studies via a cross case analysis. Under the nodes that were created for analyzing the data coming from the different sources, I searched for patterns within cases in order to identify dimensions or constructs from the literature, and then looked for within-group similarities and inter-group differences.

**Table 2.3: Codes for EI**

CODE	DEFINITION / DESCRIPTION

Perception of Emotions	The ability to “engage in sophisticated information processing about one’s own and others’ emotions and the ability to use this information as a guide to thinking and behavior.”(Mayer, Salovey, and Caruso, 2008, p.503)
Expression of emotions	“Observable verbal and nonverbal behaviors that communicate an internal emotional or affective state. Vivid examples of emotional expression are facial movements.” (Dorset Research and Development Support Unit, 2003)
Appraisal of emotions	“The ability to discriminate between different feelings and label them appropriately, and to use emotional information to guide thinking and behavior.” (Salovey and Mayer, 1990, p.189)
Interpretation of emotions	The ability to analyze the meaning of emotions and promote thinking by managing emotional knowledge. (Mayer and Salovey,1997)
Ability of linking case to emotions	The capacity to process emotional information and messages in order to connect them with real life circumstances and situations. (Mayer and Salovey,1997)
Self confidence/ self-esteem	This terms refers to a person's overall subjective emotional evaluation of his or her own worth and also incorporates personal beliefs. (Hewitt, 2009)
Ability to distinguish hidden and/or dishonest Emotions	Ability to understand if an individual’s emotions and behavior is honest or not, according to a person’s thoughts. (Mayer and Salovey,1997)
Self control	The ability to control oneself in terms of emotions, behavior, and desires with an ultimate aim of function within society’s rules. In psychology it is sometimes also called self-regulation. (DeLisi, 2015)



Concrete Asking of Reinforcement by pupils	This term involves urge of student to be mentored by teacher during teaching process. (Rieber, 1997a)
Reaction to verbal reprimand	Potential reaction either positive or negative in cases that an adult scolds verbally.
Empathy	The capacity to “understand what another person is experiencing from within the other person's frame of reference.” (Bellet and Maloney, 1991, p.183)
Emotional distraction	Inability of staying focused and emotional stable during teaching. This distraction may also co-occur with inappropriate adoption of emotional reactions.

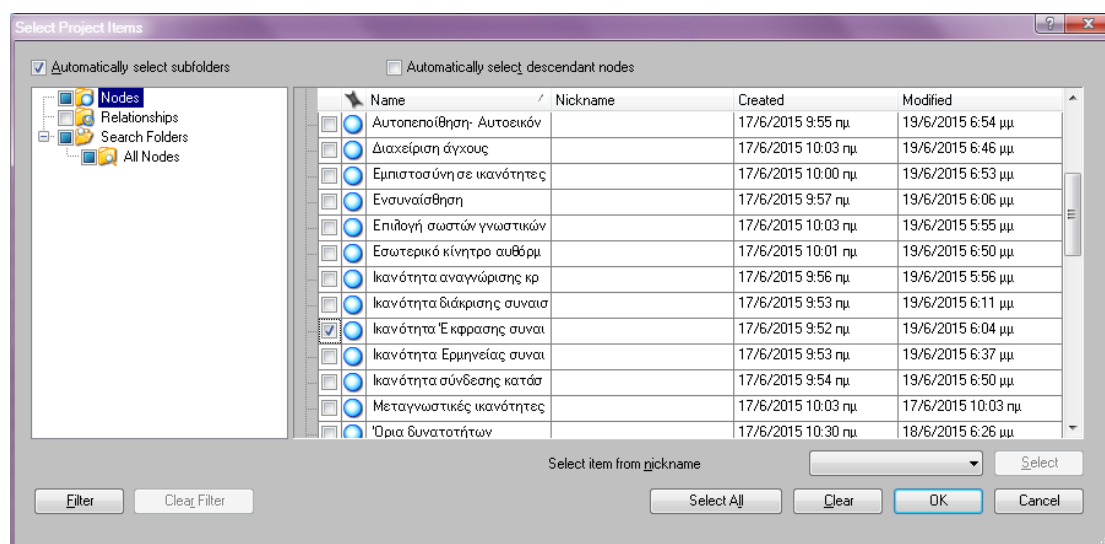
**Table 2.4: Codes for EI and Pupil Performance**

<b>CODE</b>	<b>DEFINITION/ DESCRIPTION</b>
Ability to stay open to failure	Reflective Regulation of Emotion consists of the ability to “stay open to feelings, both those that are pleasant and those that are unpleasant.” (Mayer and Salovey, 1997, p.11)
Ability to stay open to success	This capacity refers to positive attitude of staying open both to pleasant and unpleasant feelings (Mayer and Salovey, 1997)
Trust in abilities and knowledge	Self confidence and conscious trust in knowledge during classroom activities

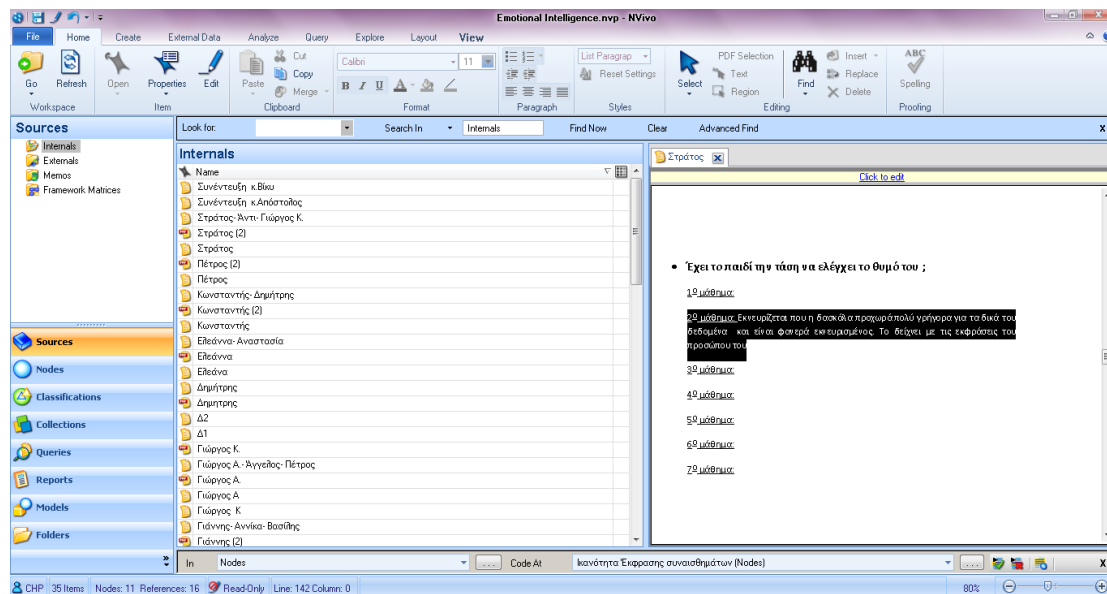
	and teaching.
Intrinsic Motivation to participate in Activities	The term refers to the “self-desire” to discover new things and face challenges aiming at gaining knowledge (Ryan and Deci, 2000). Pupils and students who have developed intrinsic motivation are more eager to improve their skills and abilities (Wigfield et al., 2004).
Compliance to classroom rules	Ability to comply with the rules that have been agreed of all pupils by the beginning of the school year.
Response to cognitive challenges	Efficient and quick responding in open ended questions referring to the areas of school either to general or school knowledge.
Appropriate choice of cognitive strategies	Choosing appropriate cognitive strategies and specific methods to solve problems, including all sorts of reasoning, planning, arithmetic (Siegler and Shipley ,1995).
School Stress management	“Responses to stress include adaptation, psychological coping such as stress management, anxiety, and depression, controlling the source of stress or learning to set limits” (“Stress”, 2014). Management of stress at school refers to the ability of effective controlling anxiety or anything that causes worry.
Metacognitive abilities	The term refers to a set of abilities and refers to “the awareness of one’s own

	thinking, conceptions, an active monitoring of one's cognitive processes, an attempt to regulate one's cognitive processes in relationship to further learning" (Hennessey, 1999, p.3)
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All sources of data coming from the observation protocols, questionnaires and interviews have been coded. This in-depth analysis provided the essential prerequisite in order to categorize, compare and contrast the data. Images-exemplars of the NVivo analysis are presented below.



**Figure 2.1: NVivo screenshot of selecting codes**



**Figure 2.2: NVivo screenshot of Observation Coding**

The second aim during the cross case analysis was to explore the interactions between these two pylons of the study. As the main research question of my study is to identify if and how EI is a contributing factor to pupil performance and especially to children with LD, I investigated the effect of one term on the other and vice versa. In the next chapter I present in groups the similarities and the differences that I gathered from the sample within the terms of EI and Pupil Performance. Some specific categories of these two terms have special interest either because of the number of times these were found in the data analysis or due to their prominence in individual cases-pupils.

## 2.7 Ethical Issues

Ethical issues arise are prominent in studies whose main sample are young children. The major principles that I have focused on concerning ethical issues were to respect privacy and anonymity issues, treat the data collected from pupils in a confidential manner and of course ask for their parents' consent.

Consent forms were given to the parents with a description of the research and asked to sign and return the forms. They were also able, during the data gathering phase, freely to withdraw or modify their consent and to ask for the destruction of all or part of

the data that they had contributed. Two copies of a consent form were signed by the researcher (me) and the consenting parent or guardian. They were also informed that in case of interviews, children voices will be recorded.

All parents that the consent forms were sent to agreed to let their children participate. The consent form can be found in Appendix no.4.

Furthermore, as described previously in this chapter a specific number of pupils (13) were chosen to participate in the study, that was however not communicated to the children, who were informed that I was about to conduct a study concerning emotions and that they would all participate in the different stages of it. My first priority was not to marginalize the pupils that were the sample of the study. All the pupils were asked to fill out the questionnaire and during the interview stage the teacher of the class informed the pupils that only some of them could participate due to lack of time.

In all stages of the study I respected the pupil's privacy and I did not include any personal data or data that the pupils asked to remain private. Furthermore, pupils were informed about each stage of the study and consent forms were given to the parents in order to inform them about the content and the procedure of the study. At the same time pupils in case of interviews gave their consent to be recorded and they were informed that if a question would make them feel uncomfortable they could choose not to answer. finally, pupils' real names were replaced by pseudonyms.

## **Summary**

This Chapter presented thoroughly the Methodology that has been followed in the current study and has been divided in sub-sections to cover the wide range of methodological issues that were taken under consideration during the design of the research. The greater part of this chapter focused in the case study method and the presentation of the research tools, whereas also an analytical presentation of the research procedure has been presented. The ultimate aim of the present chapter was to create a well-structured construct of Methodology that would be the fundamental basis for the next Chapter; the Analysis of the findings.

## CHAPTER 3

### FINDINGS

#### 3.1 Case study Analysis

##### 3.1.1 Introduction

The Case study analysis in the first part of this Chapter is presented for each pupil in the following way: introduction - history of the pupil, thematic analysis of the findings and conclusion of each analysis. The history of the pupil is based on field notes written up either while discussing with the teacher of the class or the school psychologist. Thematic analysis comes from the above mentioned codes (see Methodology, Analysis section (2.6) extracted from data collected through observation, questionnaires and interviews. The conclusion brings the findings together, signposting the way for the cross-Case analysis that follows in the second part of this Chapter.

During the Case analysis I have grouped Case studies with reference to their prominent LD (Dyslexia and ADHD). I chose to present extensively five of the thirteen pupils of the initial sample. These cases are exemplary in the way that they represent various aspects of EI in relation to Pupil Performance and regarding the severity of the learning difficulty. At the end of every Case study I also provide data coming from the other eight pupils of the sample which have been either in accordance or in controversy with the main study's sample data. Combining all the data collected from these particular pupils, the first research question is addressed: *'If and how emotional intelligence affects pupils' with learning difficulties performance'*.

Each one of the five Case study analysis aimed at a triangulation of the data by combining and analyzing qualitative data arising from different sources. More specifically, the observation protocol focused on both EI and Pupil Performance whereas the questionnaire shed light on EI and the interviews on Pupil Performance. In the Case studies these data are triangulated in an attempt to combine sources of data which maybe show the link between EI and Pupil Performance.

## **Pupils with Dyslexia**

### **3.1.2 Stratos**

Through this Case study analysis specific codes are analysed under the two main themes. For EI, this Case presents data that refer to Emotional Distraction, Emotion linked to Situation and Self- Esteem, whereas for Pupil Performance the codes Reinforcement of the teacher, School stress Management and Intrinsic Motivation of participation are presented.

Stratos attends Grade four of Primary School. He is 10 years old and according to the teacher's interview he has two siblings, one girl and one boy. His sister has ADHD. His parents have no known disability and both work. Stratos has a diagnosis of high function autism, dyslexia and dysgraphia.

Discussing with the school psychologist about his emotional development and behavior, she reports:

*“Stratos’ expressive language had severe problems in the beginning of the school year was vague, as his sentences were quite long and without the right grammar and syntax. He was not able to choose the right words while speaking and the listener had to work extra hard at decoding the message. It was quite hard to anyone and especially to his peers to have a proper conversation with him. He tended to monopolize the talking and seemed not to be interested in what the other person was talking about. He also found difficulties in focusing and he got easily distracted. While discussing with him he was talking much about his two favorite subjects: computer games and robotic and did not really talk much about anything else. It is important also that he seldom played with his classmates in the school yard. Stratos periodically had bouts of anxiety and it was much harder for him to focus during these seizures. In these cases the teacher asked him to leave the class for a few minutes in order to calm down. Lately this happens less often as we understood this tactic does not help him much”.*

As children on the autism spectrum vary, teacher has told me: “Even though during previous years he struggled with complying with classroom rules and making friends, he has improved his social skills during the last two years.”. Concerning his performance, the teacher has reported that although in the beginning of the school year Stratos had shown some poor performance especially in Language-based modules, after one year of consistent help by both the teacher and the special teacher of the school, he improved significantly his knowledge, he achieved better in tests and showed eagerness to participate in classroom activities. During third class he got mostly B’s for his performance in Language, whereas he gained easily A’s for performing well in Mathematics.

Stratos, being an autistic boy, has typical emotional and social behaviors according to his syndrome which often affect his skills and his relationship with other people, which was often referred to during interviews with the teacher and school psychologist. One of the main characteristics of his behavior was emotional distraction, which is presented thoroughly below.

In the data collected during the initial data collection stage, the code ‘emotional distraction’ featured strongly, making it clear that Stratos was often emotionally distracted in the classroom.

The behaviours observed and presented below in Table 3.1 clarifies this further:

**Table 3.1: Stratos’ behavior showing emotional distraction**

1 <sup>st</sup> lesson	Teacher does not stand next to him and he starts talking with his classmate.
2 <sup>nd</sup> lesson	One of his classmates asks the teacher a question and Stratos loses his concentration, takes a toy from his bag and starts playing with it.
3 <sup>rd</sup> lesson	He cannot keep up with the class rhythm and he says to the teacher “I am tired, I can’t do this exercise”.
5 <sup>th</sup> lesson	He soliloquizes during lesson and he does not write down dictation. The teacher also becomes annoyed and tries to



	convince him going further with dictation.
7 <sup>th</sup> lesson	Teacher needs to repeat a lot of times what he has to do in order for him to start listening to her.

As evidenced from the above table and drawing also on my own observations of Stratos' behavior in the classroom, his behavior in the classroom is not stable. He often loses his concentration, fails in keeping up with his classmates, soliloquizes and needs extra attention from the teacher in order to follow her requests. His emotional distraction defeats his efforts to improve his school performance, as he finds difficulties to keep up with the class activities. Analyzing the observation data, we might come to the conclusion that emotional distraction is one of the factors which affects Stratos' performance particularly in terms of his effectiveness to answer the teacher's *questions*, in terms of being *competitive* and *participating quickly* in classroom activities. These three elements are crucial to form the overall image of Stratos' performance, as they seem to impact on key aspects of the teaching process.

In the same vein, it became obvious during observations that he had a strong relationship with the teacher, asking concretely for reinforcement. Stratos would sit next to her and ask often for her support and encouragement when he faced difficulties in accomplishing tasks.

Most of the notes in the observation protocols refer to this issue of attachment, as depicted below:

**Table 3.2: Stratos' relationship with the teacher**

1 <sup>st</sup> lesson	If the teacher does not engage him to start working on an exercise at Language, he does not start any of the activities.
2 <sup>nd</sup> lesson	He is working on an exercise together with teacher that he claimed he could not do on his own. Teacher asks him to continue on his own and he refuses.
3 <sup>rd</sup> lesson	He gets angry with the teacher because she tells him to stop

	asking questions during test. His reaction is to pull his hair in order to draw her attention.
6 <sup>th</sup> lesson	Teacher punishes him because he was behaving badly by not allowing him to sit next to her. His gets angry and disappointed and he makes this evident with his facial expressions.

This strong attachment that the Stratos had with the teacher, is clearly depicted above and evidenced also during classroom observations. This seems also to affect his performance, as his intention to please the teacher and ask for her reinforcement makes him perform better when she stands next to him. On the contrary when he does not receive any reward or interest his lack of effort is quite obvious.

In his interview extract below we also see that he admits performing better in cases that the teacher shows concern towards him:

*R: How do you feel when the teacher recompenses you?*

*Str: I feel really nice and pleased and I put even more effort.*

*R: Do you always do your best in class?*

*Str: I do not always put great effort in everything. If the teacher is next to me I always try to do more.*

As arising from the interview, the reliance on the teacher's presence leads Stratos to perform better in class as a result of being rewarded by the teacher (rather than as an intrinsic personal need). On the contrary, when the teacher does not stand next to him, he gets distracted and stops whatever he is doing. Furthermore, he seems to link his sense of success within the class to the frequency of the teacher's encouragement/feedback. This also affects his intrinsic motivation to participate in activities, to achieve more and perform better. In Stratos' Case the motivation seems to be linked not only with his internal ambitions and expectations, as it should be, but it is also connected to external factors and in particular to the above mentioned interaction with the teacher. Therefore, in Stratos' case, his extrinsic motivation regarding his


performance is obvious in cases when his initiative often relate to fulfilling the teacher's expectations.

This seems to be the case also in his questionnaire data. In the activity that he had to choose three important people to him, he struggled with their selection. When I asked him during the questionnaire stage why he was facing difficulties with this part he answered *"I can't choose someone because they love me all the same I think and they are happy when I do something right."*

Below there is the aforementioned part of the questionnaire:

♦ Βάλε σε κύκλο τρία πρόσωπα που θα ήθελες να πουν κάτι θετικό για σένα:

δάσκαλος, γιαγιά, μητέρα, γείτονας, αδερφός-ή, θείος, πατέρας, φίλος-η.

A handwritten list of people in Greek: δάσκαλος, γιαγιά, μητέρα, γείτονας, αδερφός-ή, θείος, πατέρας, φίλος-η. Each name is circled. The word 'γείτονας' is crossed out with a horizontal line.

**Figure 3.1: Stratos' questionnaire excerpt a**

Combining the two different sources of data, we could support that the close relationship Stratos has with his teacher affects his performance concerning the eagerness he shows to participate in class. He seems to have connected his attainment with this dependency on the teacher's behavior towards him. As a result, his performance varies among school subjects as he relates it to the teacher's reactions.

Another important factor of EI that has shown to be significant in Stratos' Case is self-esteem. He described himself as follows: "I am a good and polite child, who likes playing computer games". When he was asked in the questionnaire though to point out his bad qualities, he only mentioned his bad handwriting. He also erased the question that was asking which column (good and bad qualities) was easier to fill in and why. He explained to me that he could not answer this question so he chose to erase it. It was not clear though if his denial was linked to his difficulty to express himself in such questions or it was correlated to lack of self awareness.

Below there is the part of the aforementioned activity of the questionnaire:

Τα δυνατά μου σημεία (τα καλά μου)	Τα αδύνατα μου σημεία (τα άσχημά μου)
χρηστικός συμπράττει να περνάει καλά	χαμηλά χρονογράφη

♦ Ήταν δυσκολότερο να εντοπίσεις τα δυνατά ή τα αδύνατά σου σημεία;

Όχι

✕ Γιατί πιστεύεις ότι συνέβη αυτό;

**Figure 3.2: Stratos' questionnaire excerpt b**

In the first column of the good qualities he mentioned being good at collaboration, being kind, being good at playing video games whereas in the second column that describes his bad qualities he refers to his bad handwriting. He also described himself in the last question of the interview as a person that has sometimes unexpected reactions but he is a good child and was trying hard to become a better pupil.

Comparing the above data concerning self-esteem, we could say that Stratos appears to have a realistic image of his abilities and knowledge as he can point these out quite clearly. We might also mention that being in the autistic spectrum allows him to think and express himself literally. This realistic view of himself could affect in a positive way his performance as he already knew his weaknesses and the areas he had to put more effort into.

Another important section of the questionnaire was the link between emotion and situation according to the pupil's vivid experience. Stratos faced great difficulties answering this part of the questionnaire. According to his experiences, he correlated negative feelings with incidents that had to do with accidents that caused physical pain to him or others (e.g. his sister). Positive emotions were linked to instances of play.

Below there is the extract of his questionnaire about emotion-situation:

• Μπορείς να συμπληρώσεις τα κουτάκια με προσωπικές σου εμπειρίες;

Μετάνιωσα πολύ όταν Χζυπησα τον αδελφ	Λυπήθηκα πολύ όταν Χζυπησα	Γέλασα πολύ όταν Επαιζα
Χάρηκα πολύ όταν Επαιζα	Εκπληκτώθηκα πολύ όταν Επαιζα	Φοβήθηκα πολύ όταν Σαν η φως
Ντράπηκα πολύ όταν Μου έπεσε το LEGO	Έκλαψα πολύ όταν Χζυπησα	Ευθυμασάθηκα όταν Είχα γενέθλιο

**Figure 3.3: Stratos' questionnaire excerpt c**

More specifically he notes a variety of issues such as that: he regrets having beaten his sister, he was sad when he was beaten, he laughed a lot when he was playing, he was really happy when playing, he was surprised when he fell down, he was scared when the light in his room turned off, he was ashamed when one Lego toy slipped from his hands, he cried a lot when he fell and he was enthusiastic on his birthday.

Another issue here is that compared to all the other pupils' answers in this section, Stratos answers were by far the shortest and more or less repetitive ones. During this activity he also asked a couple of times for my assistance with further explanation. He had obvious difficulty not in recognizing the emotion or categorizing it (positive or negative) but in connecting it with real incidents. This difficulty seems also to have affected his performance as he was marginalized in most of the collaborative activities with his peers. The main reason for this was that he could not keep up with their emotional shifts during the activity.

This is also connected to his anxiety bouts and school stress management in the classroom, which are clarified in the table below:

**Table 3.3: Stratos' school stress management**

1 <sup>st</sup> lesson	He is really anxious during teaching. Teacher asks him what is going wrong and although he answers "Nothing", he keeps on being anxious.
2 <sup>nd</sup> lesson	During teaching he takes out of his bag his snack and starts eating.
3 <sup>rd</sup> lesson	He asks the teacher if he could go out of the class for a while.
4 <sup>th</sup> lesson	Teacher asks whole class to quickly copy an exercise from the board. Stratos is anxious because he finds difficulties in writing fast. He drops down his pencil.
5 <sup>th</sup> lesson	He says to the teacher "I cannot accomplish this test, time is too limited, I cannot think'.

His anxiety affected much his performance as when his learning difficulties prevented him from keeping up with the pace of the class activities. In these instances he complained to the teacher of being incapable of finishing the activity, he asked for a break outside class and he even started eating during teaching to show his denial to comply with the classroom rules.

Although he showed some difficulty in controlling his anxiety or stress and linking his emotions with each situation, he indicated a high level of empathy toward his classmates, especially when they were experiencing negative feelings. He admitted doing so also during the interview:

*R.: Who is your best friend? How would you feel if he is really happy and how if he is really sad?*

*Could you also describe a case that you helped a friend of yours in order to make him feel better?*

*Str.: I have a lot of friends inside and outside class. My best friends are Merkourios and Alexandros. If something makes them really happy, then I will*

*also feel really nice! In case that some of my friends will feel sad I would feel sad. One of my friends has asked my help for a construction. I helped him and I have felt really nice! (Interview 2.5)*

This high level of empathy has been obvious during all the study's phases and is connected to one of the higher aspects of EI according to Mayer's and Salovey's four branch model. Stratos has indicated a couple of times during the interview and the observations that he was able to share his classmates' and friends' feelings and experiences. This is quite a surprising finding as Stratos has shown lack of other lower leveled aspects of EI, like Emotional Perception and thus indicated to have the capacity of empathy. This finding raises issues concerning if and how the four branches of the model are independent and interact.

These findings lead firstly to the conclusion that Stratos' emotional distraction is connected to the teacher's presence, which affects mostly his school performance and attitude by making him vulnerable in accomplishing tasks and participating in the classroom. Furthermore, his performance is obviously affected by his difficulty to keep up with the class pace, his anxiety and his difficulty to link emotions with situations. It could be assumed though that these last three factors were not connected to potential low levels of EI but to the impact of his learning difficulties.

Stratos' Case study presented particular aspects of EI and Pupil Performance. More specifically the relation between these two terms was investigated though thematic analysis under specific codes coming from both the subsections of the study. The codes used for Stratos' Case study were: Emotional Distraction, Reinforcement of the teacher, Intrinsic Motivation of participation, Self-esteem, Emotion linked to Situation and Stress Management. This analysis has been conducted taking into consideration all sources of data.

As it was depicted in the research tools, Stratos' behavior presents some patterns which may show a link between EI and Pupil Performance. Combining the above mentioned data it is assumed that emotional distraction influences his effectiveness whereas his strong attachment to the teacher influences his attitude towards school subjects. Emotional distraction and his concrete need of teacher's reinforcement seem

to be linked to his motivation to participate in class and his will to take initiatives during activities.

In addition, his anxiety seizures and difficulty to link emotions and situations prevents him from collaborating with his classmates and often marginalizes him, affecting his relationship with his classmates. To sum up and answer the main research question we could say that in this Case study EI indeed would seem to affect Stratos' performance under the particular special circumstances presented through his data.

### **3.1.3 Anastasia**

This Case study focuses on specific codes: Trust in abilities and knowledge, Reaction to Verbal reprimand, Self-esteem, Intrinsic Motivation and School stress Management, as important findings came out through the thematic analysis of this pupil's data. Furthermore these codes indicated to have a strong relationship in between that I would attempt to highlight during the current Case study.

Anastasia is also attending the fourth class. She lives with her mother and her older sister, as her parents have divorced. Anastasia has been diagnosed with dyslexia. Her difficulties are mostly tracked in visual scanning, processing, spelling and working memory. Her mathematic skills are also poor and more specifically she faced difficulties with the four operations and problem solving, even if it had a real-life context. It happened quite often during lectures that she was daydreaming. This caused teacher's annoyance and as result she has been quite often scolded. Concerning her relationship with her peers she had only one close friend and seemed to want to blend in with their classmates but with not great success. This often caused to her stress and anxiety.

The majority of notes during observation protocols concerned her lack of trust in her abilities. In all cases that she could not keep up with the classroom activities, she was closing her books or starting talking to one of her classmates. Some other moments she was complaining that exercises were too difficult for her or that the teacher was not impartial to her. The table below clarifies that further.



**Table 3.4: Observations concerning Anastasia's trust in abilities.**

1 <sup>st</sup> lesson	She closes her book while trying to finish an exercise because she does not know what she should do.
2 <sup>nd</sup> lesson	She stops trying solving a Math exercise and starts talking to her classmate in order to copy the solution.
3 <sup>rd</sup> lesson	Teacher has asked pupils to write an essay. Anastasia is erasing almost every sentence that she has written. After 25minutes she managed to write three full sentences. She is really disappointed, so is the teacher
5 <sup>th</sup> lesson	Teacher asks class to solve one more exercise and Anastasia is saying "Why Mr. Apostolos?". She thinks it is a kind of punishment and not a chance for further practice.
6 <sup>th</sup> lesson	She complains that the exercise is too difficult for her.

The above table presented some typical behaviors of Anastasia, which consisted of one main point, her negative reaction of every activity that demanded extra effort. Although during the first phase of the observation protocols we hypothesized that Anastasia was a low performing pupil, in the next weeks and especially during the interview in the section of self-esteem and trust in abilities and knowledge she said the following:

*Anast.: I am good at... I don't know... What do you mean...? Hmmm... I think I am good at... I don't know what to answer. I think I am good in helping my mother and being a good friend. (Interview 2.1)*

In another part of the interview:

*R: How would you describe yourself?*

*Anast.: I am Anastasia and I am not that good at many things. I am good at some things and I try to improve myself. I try to be a good friend because I am not always. (Interview 2.1)*

Her answers were quite surprising, as she was the only pupil who did not mention any particular activity and took her along time to answer. Furthermore, it would seem that she emotionalizes friendship so much that is her first priority. Revising again the notes of the observation protocols we might come up with the idea that Anastasia's tendency to avoid exercises and complain systematically when new tasks arose is connected to the lack of trust in abilities and knowledge as a result of low self-esteem.

The behavior that was clearly depicted in the table led the teacher on several occasions to rebuke her. Her reaction to verbal reprimand was to lower her head, blush and stop putting any further effort on any subject. The field notes present a clearer picture of this behavior:

**Table 3.5: Field notes concerning Anastasia's reaction to verbal reprimand**

2 <sup>nd</sup> lesson	Anastasia starts talking without taking any permission first. Teacher scolds her and she lowers her head and she hesitates to make the question she wanted. Few minutes later teacher scolds her again because she does not pay any attention to the board and even though verbal reprimand is intense she remains inexpressive.
5 <sup>th</sup> lesson	It happens once again the teacher to bound her because she is not concentrated and she starts crying. She goes out of the class.

The teacher has partially marginalized Anastasia, as he often commented negative on her behavior and/or her performance. This happens at least four or five times during every subject and Anastasia's reaction varies from blushing and lowering her head to remaining inexpressive. A particularly strong reaction to the teacher's behaviour was during the 5<sup>th</sup> lesson when Anastasia burst into tears after being scolded. This negative relationship with the teacher seems to affect her performance in terms of her intrinsic motivation for participating and having trust in her abilities and knowledge. Important data concerning these two codes are given by the following two tables.

**Table 3.6: Observational data concerning Anastasia's trust in abilities**

1 <sup>st</sup> lesson	The teacher asks a question. Anastasia knows the answer and she whispers it, but she does not raise her hand to say it aloud.
2 <sup>nd</sup> lesson	She says to her teacher that the exercise is beyond her abilities and she can't do it on her own.

**Table 3.7: Observational data concerning Anastasia's intrinsic motivation**

1 <sup>st</sup> lesson	She doesn't participate at the lesson.
2 <sup>nd</sup> lesson	Even though the teacher insists on asking her to participate she refuses to do so, because as she mentions Mathematics are too difficult for her.
6 <sup>th</sup> lesson	She starts answering the teacher's question without taking any permission. The teacher scolds her and even though he asks her to say eventually the answer she refuses to do so.

The same conclusions emerge also from her responses during the interview. She admitted: "I am a low performing pupil because of the bad notes I receive and according to the teacher's assessment. I do not always do my best, but this does not happen on purpose."

Later during the interview I asked:

*R: What is for you the main stress source at school?*

*Anast.: The main source of my school stress is examination by the teacher because I feel inadequate to answer, even if I have studied at home. (Interview 2.1)*

At this point it is important to give prominence to a relation that has come out through the above analyzed codes; Trust in abilities and knowledge-intrinsic motivation-teacher's verbal reprimand-school stress management. Through this Case study, this

relationship run the analysis in a crucial way. More specifically Anastasia's performance was clearly affected by her teacher's negative reactions in instances when he disapproved of her attitude within the classroom. This phenomenon, in addition to Anastasia's low self-confidence, may have lead to her lack of trust in abilities and knowledge and also affected her intrinsic motivation to participate in class. She adopted this behavior in order to try to manage her stress and avoid receiving a rebuke by the teacher. So she adopted a passive and "invisible" role in order to protect herself by being exposed.

In a similar vein, when she completed the respective category in the questionnaire, she included in her good qualities that she loves her sister, she has a good family and she is a good child. On the contrary, she pointed out that she is not a good pupil and she feels bad when she is lying.

Below there is the extract of her questionnaire about good and bad qualities:

Τα δυνατά μου σημεία (τα καλά μου!)	Τα αδύνατα μου σημεία (τα άσχημά μου)
Είμαι καλή μαθήτρια	Γνωρίζω λίγο τον κόσμο
Μαθαίνω εύκολα	Δεν είμαι καλή μαθήτρια
Είμαι καλή μαθήτρια	Καλό κορίτσι δεν είμαι
Αγαπώ την αδελφή μου	

♦ Ήταν δυσκολότερο να εντοπίσεις τα δυνατά ή τα αδύνατά σου σημεία;  
 Τα αδύνατα σημεία

♦ Γιατί πιστεύεις ότι συνέβη αυτό;  
 Δεν ξέρω

**Figure 3.4: Anastasias' questionnaire excerpt a**

The above data, as mentioned before, made it clear that Anastasia does not have a good relation with her teacher, who often rebukes her. It seems though that the main source of this problem is Anastasia's lack of ability to identify emotions in self and others. Before every verbal reprimand by the teacher, he would look at her in an intense and critical way. In the majority of these moments Anastasia did not pay attention to her teacher's expressions and body language. As a consequence she keeps on doing what she should not and this causes a stronger reaction by her teacher in order to increase again her concentration.

In addition, in the field of the questionnaire that is related to Emotional Perception, she asked at least three times what she was supposed to do and even though she was given some examples, she failed in completing this section.

Her answers are shown below in the part of the questionnaire which was connected to emotional perception:



**Figure 3.5: Anastasias' questionnaire excerpt b**

Furthermore, during the interview stage, she found difficulties to justify her answers concerning the sections which referred to the emotional perception. Characteristics parts were :

*R: How do you feel when your friend is really happy?*

*Anast.: Heh.. Normal. If something extraordinary happens like taking an A in a test I would say "Well done!"*

*R: How do you feel when you are doing well in an activity? Could you show it with your body?*

*Anast.: I think I would be happy. I can't show it, I would just be happy. I can't pretend being happy at the moment. (Interview 2.1)*

These parts of the interview, connected to the former data are enlightening in highlighting Anastasia's difficulty with Emotional Perception, which affect on the one hand her performance at school and on the other hand cause difficulties in her personal relationships. This finding is revealed also during the teacher's interview who said that Anastasia has few friends and difficulties to interact with her peers as she fails to understand their emotional behavior. This is the main reason which makes her want to be a good friend and she feels the need to invest in relationships.

Taking into account all of Anastasia's data it seems that she indeed has low self-confidence not only because of her bad notes but also due to the lack of teacher's engagement and the many cases of teacher verbal reprimand during class. Together with Anastasia's difficulty to perceive emotions, this makes her inevitably marginalized by her classmates and her teacher. Hence, it is not surprising that these two factors have a negative effect on her performance as they lead her to mistrust her abilities and knowledge.

This low trust in abilities and knowledge is connected to the lack of intrinsic motivation to participate in activities, as Anastasia seemed to fear the impact of a potential wrong answer. This behavior seems to be linked to school stress management as it was difficult to her to meet the teacher's expectations in a high demanding environment like the classroom. The result was that Anastasia did not show her range of abilities and

knowledge and on the contrary she showed not to respect classroom rules, thereby ending up to be a low performing pupil.

### **3.1.4 Andy**

Through this Case study analysis specific codes are analyzed. Concerning EI, codes that are discussed are Emotional Expression and Self-Esteem, whereas under Pupil Performance category, the codes Intrinsic Motivation of participation and Staying open to success and failure are explored.

Andy has two siblings and is the youngest member of her family. Both her parents are working as successful practitioners and doctors. “Andy had already symptoms of dyslexia during the first grade of primary school.”, as teacher said during interview, but her parents were in denial of her symptoms and she did not receive any support.

At the age of eight (2<sup>nd</sup> grade) language impairments were reported by the teacher. Possibly due to the lack of awareness of her condition, she was described as having a general inability to stay concentrated in and outside class, but with no report of her specific deficit. Her dyslectic symptoms are focused on reading and calculating disorders (dyscalculia).

Andy is a slow reader and often make mistakes. According to the teacher and the school psychologist:

*“Concerning language deficits, Andy confuses letters, especially the ones with similar graphics (like  $\beta$ - $\theta$ ). She has difficulties in reading, syllabifying long words and she struggles with understanding the contents of a text. That is the reason why she gets very tired while reading and often refuses to read. Concerning Mathematics, she has calculating disorders, as she faces difficulties in carrying out the four basic operations. Andy also is not often able to remember mathematical expressions and rules. Last but not least, she does not understand mathematical problems and she has low arithmetic capabilities.”*

During the observation protocols phase, Andy did not indicate high intrinsic motivation to participate in class activities, except when solving exercises, especially concerning Mathematics, at home. She seemed especially concerned when taking notes and asks consistently her teacher if she has made any mistakes. It is revealing that neither the observational data nor the field notes referred to Andy's will to participate. On the contrary, it was often noted in her observation protocols that she lacked trust in her abilities and knowledge.

**Table 3.8: Observational data concerning Andy's trust in abilities and knowledge**

2 <sup>nd</sup> lesson	She is asking again and again teacher if she has solved right the exercise.
4 <sup>th</sup> lesson	She is asking teacher "Is it right? I am not sure at all if I have solved it right..."
5 <sup>th</sup> lesson	She is asking for teacher's help in order to check the mathematical operation.

Andy asked quite a lot of times the teacher if she has solved the exercises correctly and seemed unsure of her knowledge. Most of the times, her insistence was so strong that the teacher encouraged her to take extra time to check again her own the answers. This encouragement did not make Andy feel more secure, but on the contrary it seemed to have caused to her greater worry, which was observed through her hyperactivity or other behaviours (nail biting).

Although Andy's showed stress concerning her abilities and knowledge, she seemed to cope well with staying open to success and failure. When the teacher applauded her efforts, she smiled and showed her pleasure. She also expressed her disappointment when she did not accomplish a task or the teacher rebuked her.

The following tables clarify this point further:



**Table 3.9: Observational data concerning Andy's openness to success**

4 <sup>th</sup> lesson	Teacher says that she is really trying a lot today in Math and Language. She smiles and says thanks.
5 <sup>th</sup> lesson	She did really well at Math test according to teacher's expectations. Teacher says "I am really proud of you". Andy answers "I will try more from today onwards"
6 <sup>th</sup> lesson	She answers right to a teacher's questions and she gets really happy.

**Table 3.10: Observational data concerning Andy's openness to failure**

2 <sup>nd</sup> lesson	The teacher says "I expected you did better in this language exercise". She answers "I will try more next time"
4 <sup>th</sup> lesson	The teacher asks Andy to be more concentrated when solving a mathematical operation. She answers "I was not really concentrated by that moment, but now I know what I should pay attention on".

Andy's great advantage to be both open to success and failure is a conducive factor for her attainment. During the teacher's interview, the teacher admitted that Andy was one of the her few pupils who was positive in receiving comments and making changes in the way that she performs so as to improve. The teacher also mentioned that after Andy adopted this practice her performance gradually been improved, a phenomenon which was also depicted in my field notes.

Concerning the code Emotional Expression, Andy has in general shown that is able to recognize and express emotions, as arising from her questionnaire. Relevant extracts from her questionnaire are presented below:



**Figure 3.6: Andy's questionnaire excerpt a**

This section of the questionnaire clearly depicted Andy's ability to recognize emotions, as she was one of the few pupils of the sample that managed to fill in so many emoticons. She depicted also a variety of feelings such as happiness, sadness, surprise, concern.

The next section of the questionnaire featured her perception concerning Emotional expression and its relation to everyday experiences.

Μετάνιωσα πολύ όταν ήνω ψέματα	Λυπήθηκα πολύ όταν δεν πήγαμε θόλα	Γέλασα πολύ όταν μου ήνε ανέκδοτα
Χάρηκα πολύ όταν ήρθαν τα ξαδέέρφια μου	Ξαφνιάστηκα πολύ όταν δεν θα γίνω αυτό που ήπα- με	Φοβήθηκα πολύ όταν μου φώναζε ο μπαμπας μου
Ντράπηκα πολύ όταν με ρεζηνέριαν	Έκλαψα πολύ όταν με κτύπωναν	Ενθουσιάστηκα όταν μου ήνε νέα

**Figure 3.7: Andy's questionnaire excerpt b**

Andy managed to fill in successfully all the blank squares of this section with incidents according to her experience like cases when she felt embarrassed because she lied or she felt afraid because her parents yelled at her. The code of Emotional expression has been also detected through the interview:

*R: How do you feel if you are going well at an activity in class?*

*Andy: I feel extremely happy and I proud of myself.*

*R: Could you show it with your body?*

*Andy: She stands up, yells and smiles. (Interview 2.5)*

It seems that combining the above findings we could find a relation between openness to success and failure and emotional expression. Andy has good perception concerning Emotional Expression which allows her to stay open to success and failure. These two abilities act together so as to promote her performance and her overall attitude within classroom.

On the contrary, not believing much in herself, Andy's performance has been affected in a negative way by her low self confidence. Below there is the appropriate extract from her questionnaire, where she admitted that it was more difficult to her to find her good qualities. She specifically claimed to make many mistakes, laugh aloud, talk too much and not put in enough effort. She included in her good qualities having a good personality and being a good friend.

Τα δυνατά μου σημεία (τα καλά μου)	Τα αδύνατα μου σημεία (τα άσχημά μου)
είμαι καλή	κάνω λάθη
παίζω καλά	δεν προσπαθώ
είμαι καλή φύση	γελάω πολύ
	μερικές φορές κλώθω άβροχα
	φαναζώ πολύ (δυνατά)
	μηλάω πολύ

**Figure 3.8: Andy's questionnaire excerpt c**

Andy has shown difficulty in detecting her own good qualities and her statements were rather abstract whereas her bad qualities were obviously more and specific. Similar responses arose from the interview, as mentioned again and again her demerits. For example when I asked her strong points she answered:

*"I am not good at English, Math and French, even though I try to. And I am also not good at controlling myself when I get angry. Ah, and sometimes I do not believe in my abilities. I am a good friend though!"* (Interview 2.5)

To conclude with Andy's Case study it is important to mention again that the codes which have been presented through this analysis were Emotional Expression and Self-Esteem, Intrinsic Motivation of participation and Staying open to success and failure. All these codes created a relationship which lead to the finding that in Andy's Case EI affected her performance at school. This relationship could be further analysed in the following ways.

On the one hand, Andy has shown a high level of Emotional expression during the observation protocols and the interview phase. This seemed to affect her Openness to success and failure, as she understood that the motivation of the teacher was to help her. This interaction made her was to change gradually the way she was behaving in class and to improve her notes by making less mistakes in exercises or tests.

On the other hand, self-esteem has been also crucial in this Case study analysis. Andy presented low self confidence concerning her responses, which was responsible for her low intrinsic motivation to participate in classroom in cases where the teacher had not assured her that all her answers were correct. This cautiousness seemed to influence negatively her performance as she seemed not to be prepared or not have the will to participate.

These two relationships that have been presented above made Andy an average performing pupil, who although showed some progress, was not able to become a high achieving pupil, even if she potentially could according to her skills and knowledge.

The three Case studies, regarding pupils whose main LD was dyslexia, that have been presented above (Stratos', Anastasia's, Andy's), have shed light on particular relationships among the codes of the analysis. To be more specific, it was found that Emotional Distraction is linked to low performance caused by lack of Intrinsic Motivation, whereas low levels of Self-esteem are related to low trust in abilities and knowledge. Furthermore, low Emotional Perception skills have been found to be responsible for School Stress. Comparing the aforementioned data with the data coming from the other dyslexic pupils (Angelos, Annika, Constantis, George A., Petros, Eleanna), we could support the idea that the aforementioned codes have played a significant role in the analysis of the total sample of dyslexic pupils, as also presented in the Cross Case study analysis (3.2)

## **Pupils with ADHD**

### **3.1.5 Vasilis**

Through this Case study analysis we refer again to both pylons of the study – EI and Pupil Performance. Concerning EI, the codes of analysis which are presented in this Case study are Emotional Distraction, Self confidence/ Self-esteem, Reaction to Verbal reprimand; concerning the Pupil Performance category I look at Trust in abilities and Knowledge and Compliance to classroom rules.

Vasilis is a 10 year old boy who lives with his mother, father and younger brother. His father has a history of AD/HD, inattentive type, as Vasilis' mother reported to me. Both parents are very supportive concerning his school attitude and performance. Vasilis' mother also teaches English at the same school and that is why she often volunteers at school functions and has an everyday report for him by his teacher and the school psychologist. He was referred for a psycho educational assessment during 2nd Grade, as his parents were concerned that he may not be progressing according to his abilities.

In addition to assessing Vasilis' achievement and ability, the school psychologist used a norm-referenced behavior rating scale (Athena test). This psycho-educational assessment showed that he was above grade level in his reading and written expression skills. At the same time his overall ability was in the average range. Information from the assessment also indicated to the school psychologist that Vasilis may have AD/HD, predominantly inattentive type. Thus he suggested to the parents to be referred to a special teacher or registered psychologist for further assessment. Finally, Vasilis was recently diagnosed with AD/HD combined type.

Vasilis' teacher, Mr. Apostolos, reported the following in class:

*“Vasilis often seems to be unaware of what is happening in class, as he staring straight ahead and when asked what he was thinking replies, ‘I don't know’. There are some days though that he can be very attentive and participate well in all areas. Vasilis is a very communicative child and has many friends. He also participates eagerly in classroom activities and want to have a leading role. He*

*has very strong computer skills which he has developed using the family computer at home. He does not face any difficulties with grammar or syntax and he can word process competently. Vasilis is also really good at Mathematics.”*

The observation protocols indicated on several occasions that he did not show compliance to classroom rules. The following table clarifies this further:

**Table 3.11: Observation data concerning Vasilis’ compliance to classroom rules**

1 <sup>st</sup> lesson	He speaks during lesson to his classmate even though the teacher has already told him to stop.
2 <sup>nd</sup> lesson	He interrupts the teacher while he is explaining an exercise to say something that is not promptly linked to the lesson.
6 <sup>th</sup> lesson	He stands up because he wants to sharpen his pencil.
7 <sup>th</sup> lesson	His classmate is answering the teacher’s question concerning a mathematics problem and he interrupts him without raising his hand.

Vasilis has indicated a couple of times that he found it difficult to function in an organized framework like the classroom. Here I could also note that during the interview I needed to ask him several times to stop interrupting other pupils while they were responding and stop wandering around the class. Although Vasilis had in general shown a strong tendency not to comply with rules, it seemed that his motive was not to annoy others. So we could hypothesize that this attitude is strongly connect to his learning difficulty, AD/HD, that prevents him from having a consistent attitude towards other people.

In the same vein, in other observation protocols it was also observed that he was not complying with his teacher’s criticism, particularly when he was being scolded, data which are presented clearly in the table below.

**Table 3.12: Observational data concerning Vasilis reactions to the teacher’ s verbal reprimand**

1 <sup>st</sup> lesson	Teacher scolds him and he smiles.
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3 <sup>rd</sup> lesson	Even though teacher has asked him to be quiet, he keeps on teasing his classmate.
4 <sup>th</sup> lesson	Teacher looks at him strictly and Vasilis becomes quiet for a while. Five minutes later he starts talking again.
5 <sup>th</sup> lesson	Teacher criticized him because he is abstract. Vasilis lowers his head, but he does not apologize. Few minutes later he is commenting ironically on being told off.
7 <sup>th</sup> lesson	Teacher scolds him and he concentrates again.

In most cases, Vasilis did not manage to understand the content of the teacher's verbal reprimand and he reacted improperly. When the teacher commented negative on his behavior he became quiet again, but after a few minutes he continued his inappropriate behavior.

During the interview he does not admit to have the type of attitude that I described in the observational data.

*R: How do you react when teacher scolds you?*

*Vas.: I feel bad, I lower my head and I try not to repeat the same thing, that annoyed the teacher or my class mates. (Interview 2.3)*

Connected to the code Reaction to verbal reprimand, it was also obvious during classroom observations and in my field notes, that Vasilis was easily emotionally distracted during lessons. This distraction was observed when the teaching was interrupted due to several reasons, for example when a girl entered the classroom or the teacher stopped the lesson to say something irrelevant to the topic.

In these cases Vasilis found it difficult to concentrate again. He needed at least ten minutes or so to focus and this affected his performance as on several occasions the teacher asked him a question right after he interrupted the lesson and Vasilis was not able to answer properly.

Concerning not complying to the class rules, it is crucial to say that the majority of these behaviors were mainly connected to moments when he was hyperactive. This is the



main reason we could connect them to his AD/HD. Apparently, though, these moments affect his overall performance as his concentration waivered and it took him at least five to seven minutes to start paying attention again to the lesson.

Really intriguing is also that under the code Trust in abilities and knowledge, Vasilis would often show lack of trust in his self. For example he continuously asked his teacher if he was doing well in the test, if he has adequately answered the teacher's questions and so forth. The table below, refers to this code.

**Table 3.13: Observational data concerning Vasilis' trust in abilities and knowledge**

1 <sup>st</sup> lesson	He asks teacher three times during the lesson: "Are there any mistakes in the exercise. I am not sure of my answers. I want help."
3 <sup>rd</sup> lesson	Children have been given a reading comprehension test. Teacher has already given clarifications, but Vasilis wants to be sure and asks again. "Explain to me again please."
4 <sup>th</sup> lesson	He gives his notebook to the teacher and asks; "Is it ok? I am not sure of my answers."
7 <sup>th</sup> lesson	He continuously asks the teacher to repeat the words of dictation.

Vasilis often indicated that he did not trust himself concerning his abilities and knowledge. He was asking concretely for the teacher's help and would on several occasions ask if he understood well what he had to do in each activity. This repeated behavior is a clear sign of lack of self confidence.

In contradiction to the above mentioned behavior, when Vasilis completed the questionnaire concerning self- esteem, he mentioned that he is a good friend, he laughs a lot and he makes others feel comfortable. He admitted that his only demerit was that he does not like to share his things. He could have also justified his answers by noting that it was more difficult to discover his bad qualities because he has many good and strong qualities.

It is important to mention that Vasilis was one of the very few pupils that filled in so many merits in the column and one of the few that found more difficulties when filling in the demerits column. This might lead to two different conclusions. Either we could assume that Vasilis is really self confident according to his answers or we could say that he is unsuccessful in having a realistic image of his self-esteem, that prevents him from recognizing his weaknesses. Below I state another extract coming from his interview.

Referring to the code Self-Esteem I also asked him:

*R: Are you a good, average or poor performing pupil?*

*Vas.: I am a good pupil because of my good notes at tests and progress reports.*  
(Interview 2.3)

Furthermore, I asked in other section of the interview:

*R: Do you compare yourself with others?*

*Vas.: No, I do not compare myself with classmates.* (Interview 2.3)

It would be enlightening to compare and contrast all the data coming from different sources which are referring to the same code; Self-esteem. Vasilis responses to the questionnaire and during the interview differ in terms of the observational data collected. Even though in the classroom he was one of the pupils who showed lack of self confidence and asked several times for the teacher's help. On the contrary when he filled in the questionnaire and answered my questions during the interview he has shown to be self confident.

His performance is also affected due to the aforementioned adoption of inappropriate behaviors within the classroom, which often resulted in being scolded by the teacher. Through these behaviors Vasilis becomes marginalized and creates for himself the image of "a bad and disobedient boy", according to the teacher. As a result, every time he causes some disturbance in class, his classmates think that is something normal for him, as arising from the field notes and the discussion with the teacher. On the

contrary, Vasilis has formed another self-image, as he thinks that he rarely causes inconvenience or does not comply with classroom rules.

As his behavior within the class followed a particular pattern, we could reach the conclusion that his controversial attitude is due to his inability to create a stable framework for his self-esteem. It is possible that his concrete asking for help during observation protocols was made on an unconscious level caused by lack of trust in his abilities and knowledge. On the contrary, when it was clearly stated a question regarding his self confidence he did not manage to answer them on a realistic base.

To conclude with this Case study, it is important to mention that drawing on all his data, Vasilis has shown to be a pupil who did not comply with classroom rules, received criticism by the teacher but he did not alter his behavior. He has also been obviously emotionally distracted and has shown partial lack of self-esteem. Apparently these four factors affect his performance and his overall image within the classroom.

### **3.1.6 Yiannis**

This Case study analysis refers to Yiannis and will attempt to shed light on the codes Trust in Abilities and Knowledge, Self- esteem and Self-control and their possible affect on his attainment.

Yiannis is 10 years old and he is an only child. Both his parents work and his mother is an English teacher at the same class Yiannis is attending. Yiannis has a close relationship with his grandparents and has great reliance on their opinion. As reported by his mother, his problems started as early as preschool, because his teachers there reported that he found difficulties in completing tasks, following the classroom rules and concentrating for more than 5 to 7 minutes. His mother also noticed that he was hyperactive at home. Yiannis together with his parents has visited many specialists the last years in order to receive an accurate diagnosis. Only in the last year they managed to have an accurate and complete diagnosis. Yiannis has AD/HD (inattentive and impulsive type) combined with reading disorders. His teacher and mother described him as a happy and communicative child with many friends.

The teacher of the class also mentioned, during the interview, that:

*“Yiannis is often disorganized, he has a hard time paying attention to details and a tendency to make careless mistakes. His handwriting is often messy and careless. Moreover Yiannis has trouble staying on topic while talking and struggling with following social rules. Concerning his impulsivity, Yiannis is impatient and has a hard time waiting to talk or react. Lastly concerning Language subject his reading disorders are issued from his lack of fluency while reading and he also faces difficulties with reading comprehension.”*

His teacher reported concerning his performance that Yiannis is a good performing pupil mostly in Mathematics. It was also quite clear during the observation protocols that Yiannis’ attainment was affected by his impulsivity, as he felt quite about his answers. This impulsivity makes him incapable of controlling himself. Some examples of this behavior are shown in table below:

**Table 3.14: Observational data concerning Yiannis’ trust in abilities and knowledge**

2 <sup>nd</sup> lesson	He is lifting both his hands to answer teacher’s questions and tries to catch his attention.
5 <sup>th</sup> lesson	He says to teacher “Please, please, I know this...”
6 <sup>th</sup> lesson	Teacher is explaining something to another pupil, Yiannis barges in and asks something irrelevant.
7 <sup>th</sup> lesson	He wants to participate in an activity and starts yelling to the teacher “ I want to take part, choose me...”

Yiannis often interrupted the teacher even before finishing a question in order to raise his hand and say “Please, please I know, choose me...”. In most cases though he gave the wrong answers, not because he did know the right one but because he was in a hurry to be the first that would answer the questions. In these cases, the teacher disapproved of his behavior and impatience. Yiannis’ reaction was to initially lose his

interest in the lesson, but after a few minutes he concentrated again and he anticipated the right moment to participate in the classroom.

Connected to this behavior which has just been described is Yiannis' self-esteem. Yiannis adopted a specific way of catching other's attention in class by over-demonstrating his abilities or knowledge. He would often want to become the central point of interest during teaching, as shown below.

**Table 3.15: Observational data concerning Yiannis' self-esteem**

1 <sup>st</sup> lesson	He raises his hand before even teacher finishes the question. He is disappointed when teacher does not choose him.
2 <sup>nd</sup> lesson	While teacher is repeating again the words of dictation in order to give pupils more time to check them, Yiannis has already closed his notebook. Teacher asks "Why don't you look at your notebook?". He answers "I am sure everything is correct!"
4 <sup>th</sup> lesson	He comments on an exercise "This is rather easy for me".
6 <sup>th</sup> lesson	He raises both his hands while at the same time he asks teacher to choose him to answer.

Yiannis would often demand for the teacher to let him answer first the questions, comment that the exercises were too easy for him or even deny to check his answers as he was quite sure of them.

These findings are in accordance with his answers in the questionnaire. He admitted during our interview:

*R: Do you consider yourself a good, average or bad performing pupil? Could you explain it to me?*

*Yian.: I am a high performing pupil, I am good at almost everything!*

*R: Do you compare yourself with your classmates?*

Yian.: *I compare myself with others only when I have got a higher note than them.* (Interview 2.3)

During the questionnaire phase, he gave controversial answers concerning his good or bad qualities. He mentioned in the good qualities column that he is a good friend, a good pupil and that he is improving gradually, whereas in the bad qualities column he mentioned that he often feels uncertain and feared.

Below there is the extract of his questionnaire:

Τα δυνατά μου σημεία (τα καλά μου!)	Τα αδύνατα μου σημεία (τα άσχημά μου)
Συντροφικότητα	αβεβαιότητα
οι φίλοι	συννοκαμψία
καλό σπουδαστής	δυσία
παιρνω	

♦ Ήταν δυσκολότερο να εντοπίσεις τα δυνατά ή τα αδύνατά σου σημεία;

Ήταν πιο δύσκολο να εντοπίσω τα αδύνατα σημεία.

**Figure 3.9 Yiannis' questionnaire excerpt**

Some minutes before the end of the questionnaires, I approached Yiannis to ask him what he meant by the words “uncertain” and he answered: “Sometimes I would have liked to feel more self confident”. This statement has been quite intriguing as the findings of all other tools lead to the reverse conclusion and perhaps then his behaviour could be characterized as “impulsive” and not “confident”. We could here mention that as self-esteem reflects an overall subjective emotional evaluation of his or her own worth and also incorporates personal beliefs (Hewitt, 2009), in case of Yiannis the way he chose to show his self confidence in front of his classmates and teacher was not the real evaluation that he revealed during his interview.

Trust in abilities and knowledge, self-esteem and self-control seemed to be the three crucial codes revealed through this Case study analysis. As mentioned before, Yiannis' learning difficulty is partially responsible for his impulsivity in class. This impulsivity is, however, connected to his strong trust in abilities and knowledge, which of course come from his good skills especially at Mathematics. These two factors lead Yiannis to want to show these skills to his classmates and teacher by adopting a sometimes inappropriate behavior.

This behaviour makes him lose his self control and leads the teacher to disapprove this behavior. As a consequence, Yiannis seems to build a strong self image to refute the teacher's comments. His levels of self-esteem are however revealed to be unstable as arising from the questionnaire. The most important finding though is that Yiannis' performance has not been affected by his misinterpreted self-esteem. He makes good progress in class and his will to participate in the classroom activity grows rapidly during fieldwork.

We could assume that perhaps Yiannis' Case study is a negative one in terms of that his EI seems not to affect his Performance. To be more specific one of the key aspects of EI is self-esteem which plays a crucial role to pupil's performance. It seems though that in the present Case study, even though the pupil over estimated his abilities and knowledge, this does not lead him to a wrong response to the teacher's questions. In other words the fact that the pupil's self-esteem is not based on concrete evaluations, during classroom activities he is one of the best performing pupils in class. One possible explanation for this lack of relationship between the two pylons of the study could be Yiannis' learning difficulty, AD/HD if we would revise the controversial data coming from different sources. Then we could come up with the conclusion that Yiannis' impulsivity, due to his AD/HD, enlarged upon the externalization of his self-esteem and this could lead to misleading ideas concerning his self-image.

Vassilis' and Yiannis' case studies have been exemplars of the pupils with ADHD regarding the severity of their LD and the richness of the "raw data" that allowed me to elicit the relations between EI and Pupil Performance. Referring to the other pupils with ADHD, Dimitris and George K., the analysis of the findings revealed that they faced difficulties in controlling themselves due to ADHD and that made them not comply with

classroom rules. This pattern has also been evidenced in Vassilis' and Yiannis' Case studies. Furthermore their impulsivity often caused an over demonstration of their abilities and knowledge while often revealing a misleading self-image. To conclude, we could support the idea that the findings of the two main Case studies (Vassilis' and Yiannis') have been in accordance with the analysis of the data of the other two pupils with ADHD.

### **3.2 Cross Case Study Analysis**

This chapter has two sub-sections. The first one focuses on comparing and contrasting the findings arising from the codes used in Case study analysis within the five pupils presented above. The second one aims at analyzing these findings with the qualitative data (coded via NVivo) collected from the other pupils in the sample.

#### ***3.2.1 Comparison between the 5 main Cases according to codes (Pupil Performance & EI)***

The five Case studies revealed that some of the codes had special interest and interacted through the analysis. Codes which are here further analysed from the theme EI are: Emotional Distraction, Self-confidence / Self-esteem, Reaction to verbal reprimand and Self-control, whereas from the theme Pupil Performance: Trust in abilities and knowledge, Intrinsic Motivation, Staying open to Success and Failure and School stress management.

Emotional Distraction, used as the term which describes the inability of staying focused and emotionally stable during teaching, has been one of the most popular and most discussed codes in the Case study analysis. This claim is justified by the fact that Emotional Distraction is strongly related to many learning difficulties as Dyslexia and ADHD, as discussed in Chapter 1 (1.3). A great part of the sample was emotionally distracted during teaching and this inevitably affected their performance in terms of being able to answer the teacher's questions, being competitive and participating



quickly in classroom activities (e.g. Stratos' Case study). In this Case study Emotional Distraction has been also correlated to School stress Management, as the pupil could not keep up with the pace of the class activities and complained of being incapable of finishing an activity. For other pupils, emotional distraction was connected to finding difficulties to concentrate again in teaching (Vasilis, Anastasia) and this has caused significant delays in being able to follow the classroom activity. The result was to receive consistent help by the teacher in order to be able to concentrate and accomplish their tasks.

An important link was found between the codes Self confidence/ Self-esteem and Intrinsic Motivation of Participation and Trust in abilities and knowledge. Pupils who had a realistic framework of their self-esteem and average trust in their abilities and knowledge were able to detect whether they knew something or they had put more effort in an activity (Stratos' Case study). In other Case studies, pupils who had not a stable image of their self-esteem seemed to have a lack of trust in their abilities and knowledge (Vasilis' Case study). Low self-esteem has also lead to poor trust in abilities and knowledge and reduced intrinsic motivation of participation (Andy's and Anastasia's Case study). It is though important to mention that the pupils who have shown trust in abilities and knowledge and strong self-esteem have been open to success and failure. This interaction between the aforementioned codes seemed to affect positively their attainment as they showed much improvement in terms of participating in class and answer properly the teacher's question compared to their classmates. On the contrary, in cases that pupils have been overly self -confident, their performance seems also to be affected, as it has made them impulsive, asking for a leading role within class and receive verbal reprimand by the teacher. This negative image influenced also the teacher's opinion about this particular pupil (Yiannis' Case study).

Last but not least, the code Reaction to Verbal reprimand has similarly links with pupil attainment. Verbal reprimand in most of the cases has been the result of not complying with classroom rules. It has been clear that in the cases that the pupils did not manage to understand the real meaning of the verbal reprimand, in most of the times this affected negatively their performance as they were not able to focus on the problematic behavior and improve it properly (Vasilis Case study). In other cases, like Anastasia's

Case study, it has been assumed that the teacher's verbal reprimand had a negative effect on her performance as the pupil felt marginalized and her intrinsic motivation for participating has been influenced negatively.

### **3.2.2 Classroom data according to codes**

This section will present the whole classroom data according to the codes using qualitative data arising from the observation protocols, the questionnaire and the interviews. The table (p.103) described briefly the pupils who have been included in the sample but were not extensively presented as Case studies in the analysis.

#### **Emotional Perception**

One of the basic branches of EI is Perception of Emotions. All pupils during the observations have shown that they were recognizing emotions in oneself and others (their classmates' and teacher's) and in some cases have also expressed their empathy in cases that they were recognizing negative feelings. For example, in the observation protocols I noted that: "Angelos was trying to make his classmate feel better because the latter feels disappointed due to a low score that he has achieved in the Mathematics test". Stratos indicated also similar reactions as it was evidenced in his Case study. Same findings arose also while analyzing interviews with the children. In all the sections related to Emotional Perception pupils have shown high levels of identifying emotion in one's physical states, feelings and thoughts.

However one of the pupils that have also presented in the Case study analysis (Anastasia) seemed not to follow this pattern. It is interesting however to note that although Anastasia indicated a couple of times that she was able to identify emotions in self and others, she did not manage to fill out the first page of the given questionnaire concerning Emotional Perception. By the first time I asked her why she was not doing it, she answered that she could not understand what she should do. After I explained to her extensively the purpose of the activity and I also gave an example, she asked for some more time, but finally she drew the squares that she supposed to fill with face-emotions.

This pattern of high emotional appraisal and perception level allowed students to be flexible during classroom activities by identifying if and how much they matched teacher's expectations. Depending on how sufficient they thought they performed, they changed their attitudes to do better in activities or tests.

### *Openness to Success and Failure*

As it sometimes happens during teaching, there were moments during observations that pupils of the sample were doing well, so they received the teacher's praise and others that they experienced failure. Concerning the ability to stay open to Success and/or Failure pupils that have indicated reactions of acceptance to Success have shown a similar level of openness to Failure and vice versa.

For example, when I asked Eleanna during the interview how she feels when she succeeds in accomplishing an activity, she answered that she would feel really happy and in order to show me her happiness she gave me an example by smiling and raising her hands. In the same vein when I asked George K. to express with his face and body his happiness and enthusiasm, he stood up and jumped in a happy mood.

The same pupils indicated high levels of openness in cases of failure by trying to find out their weaknesses and mistakes in order to improve their performance and attainment. Other pupils on the contrary, like Annika, have shown lower levels of acceptance to both success and failure by expressing neither satisfaction nor disappointment in case that they were accomplishing or not an activity/test. These pupils have indicated that they were not feeling confident enough to express positive or negative feelings. Being open to Success and Failure helped pupils to be positive on identifying their strengths and weaknesses. On the contrary pupils who have not indicated high level of acceptance struggled with enhancing their performance. These findings are in accordance with the next thematic analysis; Self- esteem.

### Self- esteem

Self-esteem and self confidence that form one of the main ingredients of EI and furthermore penetrate the majority of other aspects of EI. Most of the pupils (e.g. Stratos, Eleanna, Angelos, Vasilis et al.) have indicated high levels of self-esteem during classroom observations; they participated during lessons, they supported their opinion and in the case they were mistaken, they systematically tried to reformulate their answers and understand their mistakes. Similar findings also arose from the interviews. All pupils responded that there were many courses or activities that they were good at. In most of the cases though their first and spontaneous answer was to mention some sports, abilities or achievements that were not correlated to school activities. On the other hand, when they were asked in the questionnaire to point out their qualities they faced difficulties. In other words the majority of pupils seemed to be self-confident but at the same time they faced difficulties in speaking about their personality merits and not their physical ones and recognizing objectively their demerits.

An extreme example was Annika who managed to fill only one merit in the list of advantages (“being a good friend”) and the category of defects were left blank. Moreover, in the stated questions below this table (“Which of the two columns was more difficult to be filled? Why do you think that happened”), she failed to write a response.

# ΔΥΝΑΤΟΤΗΤΕΣ ΚΑΙ ΑΔΥΝΑΜΙΕΣ

Τα δυνατά μου σημεία (τα καλά μου!)	Τα αδύνατα μου σημεία (τα άσχημά μου)
Είμαι πολύ φιλικός	

- ♦ Ήταν δυσκολότερο να εντοπίσεις τα δυνατά ή τα αδύνατά σου σημεία;

.....

- ♦ Γιατί πιστεύεις ότι συνέβη αυτό;

.....

- ♦ Βάλε σε κύκλο τρία πρόσωπα που θα ήθελες να πουν κάτι θετικό για σένα:

δάσκαλος, γιαγιά, μητέρα, γείτονας, αδερφός-ή, θείος, πατέρας, φίλος-η

**Figure 3.10: Annika's questionnaire excerpt**

Also surprising was Eleanna's answer to this part of the questionnaire, where she is not able to find demerits.

Τα δυνατά μου σημεία (τα καλά μου!)	Τα αδύνατα μου σημεία (τα άσχημά μου)
να είμαι γλυκιά	
να είμαι σιγή	
να είμαι καλή	

**Figure 3.11: Eleanna's questionnaire excerpt**

Petros also did not respond to the same category with no justification. Also surprising was Andy's answers who found herself having more disadvantages than advantages also without being able to justify it. The other ten pupils detected more good qualities in contrary to bad. The majority of them have recognized in self that they are well behaved children, good friends and that they are trying to make other people having fun or feeling happy.

On the contrary, most of the drawbacks that they mentioned were related to self control and school. For instance, Angelos, George K. and Dimitris admitted not to control adequately their self in cases of anger. Other pupils like Andy, Stratos and George A. mentioned weaknesses concerning school demands (eg. “I am not a good pupil”, “I am not complying with classroom’s rules”). Perhaps it is worth mentioning that although all students when asked during the interview how they assume that they were good children/good pupils, they answered that this is something that they understood by other people’s reactions, such as their teachers and parents. Also significant is their choice related to important people to them in order to say something positive. All students responded that important people to them were their mother, father, siblings and in some cases the teacher.

To signpost this section, Self-esteem was one of the codes that varied depending on the pupils’ self image. In most cases pupils indicated high levels of self-esteem during the observations, which influenced in a positive way their performance.

### *Trust in abilities and knowledge*

Concerning trust in abilities and knowledge, which is highly correlated to self confidence and self-esteem, findings vary between all pupils in the sample. We might mention here the two extremes. On the one hand is Dimitris who have shown strong trust in abilities and knowledge and on the other hand Andy.

It is interesting here to note that among the pupils of the sample, Dimitris has indicated to have the strongest and most stable trust in self and abilities. He has also shown indicated that he was able to identify his limits of knowledge and abilities. Contrariwise Andy proved to have low self-esteem (as it is evidenced in the Case study analysis, 3.1.6) and this belief has undoubtedly influenced her behavior in the classroom, which was coded by observation protocols. She was speaking really low, she was not sure of her answers and even if she knew the answer to teacher’s questions she hesitated to raise her hand.

The other pupils have reacted in the range of average; in case that they knew that they were good at something, they insisted responding or participating while in cases that

they were feeling inadequate they were avoiding to take part in classroom's activities. The key point is though even if pupils had difficulties in accomplishing an activity due to lack of confidence, by the time teacher was taking action and supporting them, they were trying again under new circumstances and in most of the cases they were succeeding in accomplishing an activity or test. For example Constantis during observation phase has solved in a wrong way a math exercise but after teacher's intervention, he tried again and managed to solve it.

As shown by the above analysis pupils who have shown trust in abilities and knowledge also performed better and faster than those who felt unsure about themselves. Notes of pupils who had high self-esteem, showed high levels of self confidence and did not hesitate to support their opinion within classroom were significantly higher to those that they were not enough self confident. This finding also worked in the opposite direction. The same pupils who were more self- confident compared to their classmates were also more competitive and ambitious. The result was that the more they achieved the more they tried. On the contrary pupils who were not managing to accomplish successfully classroom or home tasks, felt disappointed and by the time they were given the chance to improve their performance they hesitated to answer teacher's questions or they said that they were not able to complete the tasks that teacher asked them to. This reminds us of the to the famous vicious circle of success and failure; "success - higher self-esteem - greater effort - greater success" and on the contrary "failure - lower self-esteem - less effort - failure" (Pintrich and Schunk, 1996).

#### *Ability to distinguish hidden and/or dishonest Emotions*

A really unexpected finding arose from evaluating the ability to distinguish hidden and/or dishonest Emotions. Even though this ability is the last part and the highest level of the first branch of Mayer and Salovey (1997), which depicts one's ability to discriminate between accurate and inaccurate, or honest vs. dishonest expressions of feeling, all students proved to have it. They succeeded in filling in two pages of the questionnaire, which included small drawings with dialogues that implied hidden feelings. All pupils also managed to share a personal experience in which they have hidden their feelings. This finding is considered as unexpected as this code belongs to

the third branch of Mayer and Salovey's model and requires a complexity of emotional and thinking processes. However pupils who have shown lack of lower aspects of EI indicated to be able to distinguish hidden feelings and even share a personal event according to that.

### Compliance to classroom rules

One last but also important point in the cross Case analysis were the findings arising from the code compliance to classroom rules. Pupils in total have shown that they had a positive attitude toward classroom rules. School has also indicated a strong belief, through teacher's interviews, that unencumbered function of the classroom is based on rules. Vasilis and George K. have shown a high level of disobedience concerning classroom rules (eg. Vasilis: He interrupts his classmate while speaking) Even though the majority of students have not complied one or more times to classroom rules, when I asked if they do so, they refused it and answered that they always follow classroom rules, with the exception of Vasilis and Stratos. They indeed admitted during the interviews that it happened few times not to be able to focus on the rules, so they did not manage to comply with them.

This chapter has presented through thematic analysis five Case studies that featured the influence of EI on Pupil Performance. Each Case study shed light on different aspects of the pylons of the study and the main codes that traverse the findings' analysis are the followings. Concerning EI the codes that indicated special interest were "Emotional Distraction", "Emotional Perception" and "Self-Esteem", whereas concerning Pupil Performance "Openness to Success and Failure", "Intrinsic Motivation for Participation", "Lack of compliance in classroom rules", "School stress Management" and "Trust in abilities and knowledge". Furthermore during the cross Case analysis in addition to aforementioned codes, the code "Ability to distinguish hidden and/or dishonest Emotions. This chapter paves the way for the next chapter where the most robust findings of the current analysis would be discussed.



## **CHAPTER 4**

### **DISCUSSION**

The current chapter draws on the research findings presented in Chapter 3 and attempts to highlight how this study reflects, differs from and extends current knowledge in the area of EI and Pupil Performance. It will review the analysis of the findings in a critical way, drawing on current literature in the field, in order to provide an interpretation of their meaning and outline their significance. It will also work towards proposing a tentative framework of concern regarding the integration of EI in school curricula.

#### **4.1 The relation between EI and Pupil Performance**

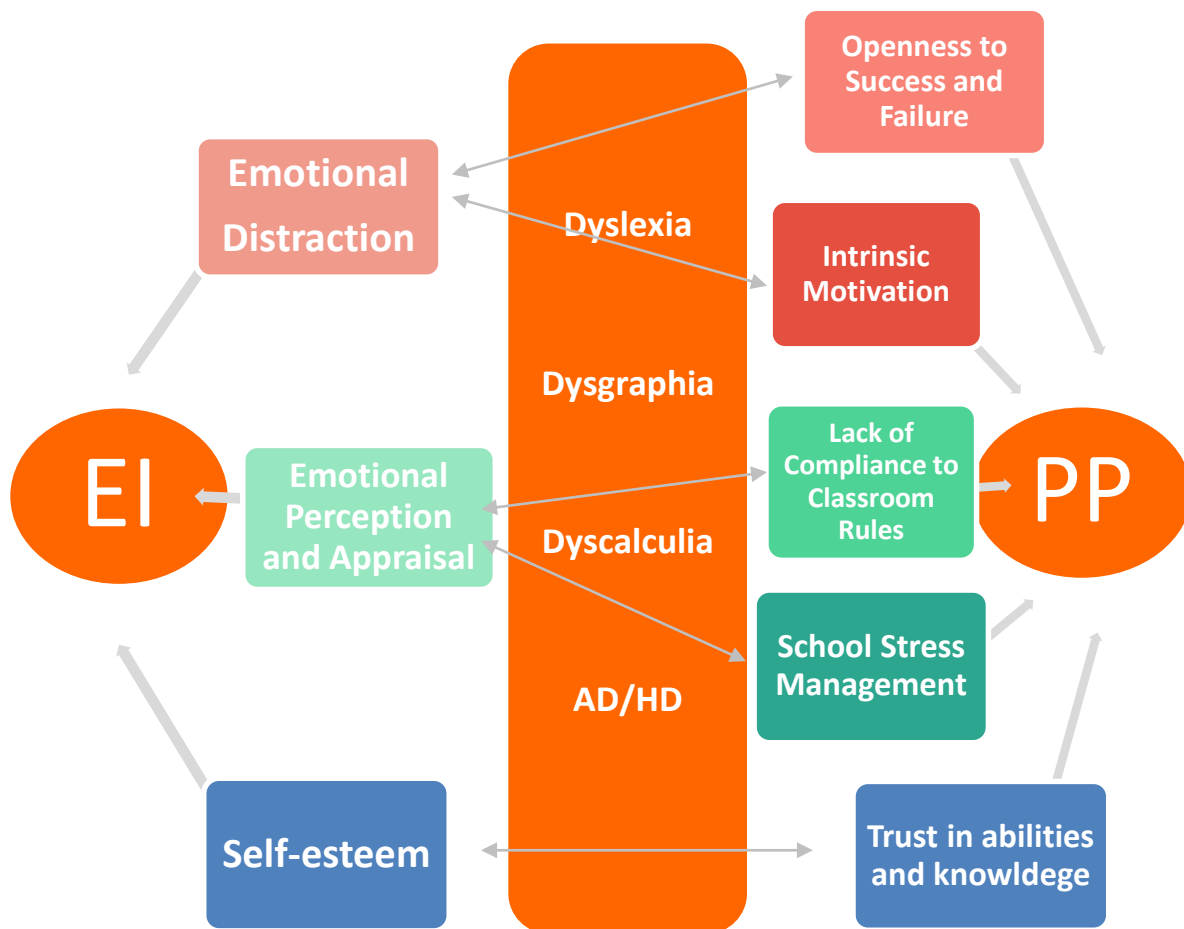
To begin with, we must restate that EI has been defined as the ability “to engage in sophisticated information processing about one’s own and others’ emotions and the ability to use this information as a guide to thinking and behavior.”(Mayer, Salovey, and Caruso, 2008, p.503). The Four branches of EI, Perception Appraisal and Expression of Emotion; Emotional Facilitation of Thinking, Understanding and Analyzing Emotions; Employing Emotional Knowledge; and Reflective Regulation of Emotions to Promote Emotional and Intellectual Growth, undoubtedly include a wide range of abilities. These abilities have been examined in correlation to Pupil Performance. More specifically I attempted to find those links that would allow me to discover if and how these two terms are connected, ultimately opening the way towards a potential framework of EI in the classroom.

The findings of the research have shown that EI is linked to Pupil performance through specific links arising during data analysis. Specifically, links were found between the following elements/themes of the two pylons of the research;

- Emotional Distraction is linked to Openness to Success and Failure and Intrinsic Motivation for Participation,

- Emotional Perception is linked to Lack of compliance in classroom rules and School stress Management,
- Self-esteem is linked to Trust in abilities and knowledge,

These relations are also clearly depicted in the following diagram (Figure 1), which presents the interactions between the aforementioned subcategories of the two pylons of the research.



**Figure 4.1: The Relation between EI and Pupil Performance**

This section will explore and present initially the sub-themes analysed under the general theme 'EI', for example 'Emotional Distraction', 'Emotional Perception' and 'Self- Esteem'. It discusses how these subthemes relate to subthemes of Pupil Performance and in particular 'Openness to Success and Failure', 'Intrinsic Motivation of Participation', 'Lack of Compliance to classroom rules', 'School stress Management' and 'Trust in abilities and knowledge', in attempting to explore the links between the two pylons/key themes of the research (EI and Pupil Performance/achievement).

#### **4.1.1 Emotional distraction in relation to Intrinsic Motivation of Participation and Openness to Success and Failure**

In the previous Chapter, Emotional Distraction was shown to relate to Intrinsic Motivation for Participation and Openness to Success and Failure. More specifically, Emotional Distraction seemed to be linked with Intrinsic Motivation, as it discouraged pupils' efforts to improve their performance and created difficulties as they attempted to keep up with the class activities (Stratos' Case study, p.72). Important is here to mention that this relationship has been shown only in one Case study but the analysis of this Case study was that constructed that it has been chosen for presentation in the current sub-section. Thus literature agrees that students who participate in class are more successful in school compared to their peers that do not (Turner and Patrick, 2004). In other Case studies (Vasilis' Case study, p.96), Emotional Distraction also seemed to affect Pupil Performance as it was related to lack of focusing on the teaching process and loss of valuable time which has influenced pupils' motivation to participate eagerly in class. It seems important here to mention that pupils with difficulties often appear to need extrinsic rewards (Witzel and Mercer, 2003). The relationship between emotional distraction and intrinsic motivation has been based on the effect of disruption on pupil's eagerness to participate in classroom activities. This situation undoubtedly effected their performance as they were not cooperative either with their classmates or the teacher and furthermore they were not capable of featuring their knowledge and abilities.

Continuing with this sub-theme, Emotional Distraction was also found to relate to the ability of Staying open to Success and Failure. As presented in the Methodology

Chapter (Chapter 2), Openness to Success and Failure involved the appropriate reaction in Cases that the pupil was rewarded or received verbal reprimand. A critical analysis of the data could reveal the potential relation between Emotional Distraction and Openness ability.

More specifically, Emotional Distraction is shown to be related to the sub-theme Openness to Success and Failure, in terms of the fact that pupils who have been distracted (mostly due to their learning difficulties, as happened in Stratos' and Vasilis' Case studies), but at the same time have shown higher levels of Openness to Success and Failure, have performed better compared to their classmates who have not had similar ability. The ability of Openness allowed pupils to perform better as they were finding out their weaknesses through the teacher's comments and improving themselves. This pattern was evidenced for example in Andy's Case study (p.89). In other words, pupils who were found to be open to success and failure evaluated more precisely the teacher's attitude towards them and altered their behaviour so that they could perform better.

Mayer and Salovey (1997) defined Emotional Openness by pointing out the reflective nature of this term. Pupils who have shown to accept Success and Failure found to be more eager to repeat positive behaviours and on the contrary they tried to lessen those behaviours that were caused negative criticism. Negative behaviours were mostly associated with Emotional Distraction, a fact that undoubtedly reflected negative pupil performance. As a result, it seems that these two sub-themes counterbalanced the adoption of appropriate or in appropriate behaviors during teaching. Pupils who were distracted but at the same time open to positive or negative comments, improved themselves and repeated behaviours that were widely accepted.

This incorporation of positive behaviours improved teacher's and classmates' attitude towards them. Additionally in some cases they were able to control to some extent their Emotional Distraction. This finding is in accordance with former studies (Barron and Harackiewicz, 2001; Elliot and McGregor, 2001) who assumed that pupils who are focused on the extrinsic consequences of their behaviours could show gradual improvement of their performance. It is assumed that these two sub-themes are

interacting in both sides and could be further related to pupils' social skills, as research says that low level of EI is accompanied by increasing impulse and weak social skills; which may indicate various forms of anti-social behavior (Petrides, Frederickson and Furnham, 2004).

To conclude this sub-section with, pupils who were emotionally distracted during teaching have shown to be on the one hand less eager to participate in class and on the other hand faced difficulties to balance out their ability to keep a positive attitude towards either praise or negative criticism. It is assumed then that the relationship between Emotional Distraction, Intrinsic Motivation of Participation and Staying Open to Success and Failure is a dynamic and developing relationship that influences pupil's performance in a wide range of behaviours within class and has also a potential influence on their social behaviour.

#### **4.1.2 Emotional Perception and Appraisal (EPA) in relation to Lack of Compliance to classroom rules and School Stress Management**

As a coding category, Emotional Perception and Appraisal (EPA) represents one of the key components of EI (Mayer & Salovey, 2004). In the current study, as evidenced in Case studies 3.1.2, 3.2.2 & 3.2.3 and in the cross-Case analysis (p. 106), EPA seemed to connect with Lack of Compliance to classroom rules and School Stress Management. The pupils' ability of perceiving emotions and valuing them was evidenced during classroom observations, and during the completion of the questionnaire. Given that the range of data reflecting Emotional Perception and Appraisal is quite wide as is the diversity of the Case studies, I will attempt to critically elicit these relations between the sub-themes.

Pupils who, during data collection, were shown to face difficulties in linking their emotions to different circumstances, also revealed problems with interacting with their peers in the classroom environment. This difficulty seemed at times to make them feel marginalized and seemed to connect with failing to manage their stress, as evidenced in Stratos' Case study (p.77). Similar findings arising from other Case studies

(Anastasia) have shown difficulties in recognizing emotions in self and others, including not only verbal impulses, but also facial expressions and body language (p.85). This inability seemed to influence the particular pupils' relationships with their classmates and the teacher and caused anxiety bouts.

As mentioned in Chapter 1, anxiety and stress affects pupils with or without learning difficulties, but it seems to be an even greater problem for students with learning difficulties (Bensoussan, 2012; Grills-Taquechel et al., 2012; Swanson and Howell, 1996). Therefore, we could support the idea that pupils with low emotional perception abilities felt more confused during teaching about their feelings and therefore adopted ineffective strategies to cope with school stress. Petrides et al. (2004) believe that different types of anxiety and stress as well as emotional difficulties like low emotional perception could influence in a negative way academic advancement. With regards to the particular sample of pupils, it could be assumed that EPA plays a significant role in pupils with learning difficulties and it is related to School Stress Management in terms of the fact that they experience difficulties with their relations to their peers and furthermore are overwhelmed by stress that they are not capable of coping with.

The findings of this study concerning the relation between EPA and School stress Management coincides with findings from other studies (Lazarus, 2006; Ciarrochi et al., 2002) that also related to the difficulty or inability of identifying emotions to stress and anxiety. More specifically, they found a potential link between this difficulty and being unable to effectively resolve problems that cause anxiety. Another interesting study has shown that a positive relationship between EI and 'emotional management' can protect individuals against psychological pressure and reduce psychological vulnerability to pressures (Mohammadi and Gharayee, 2007). Combining the results of these studies with the findings of the present study, it seems that pupils who seemed to be less emotionally perceptive may be more vulnerable to the adverse effects of school stress.

Emotional Perception and Appraisal was also shown to be correlated to the sub-theme of Lack of Compliance with classroom rules. Pupils' difficulty with discipline has played a significant role in the analysis, which was also potentially linked to teacher's verbal reprimand. Research in EI shows that pupils who face severe difficulties in regulating

their emotions have fewer possibilities to display antisocial behaviour compared to other pupils (Eisenberg et al., 2006; Hoffman, 2000). This antisocial behavior within the classroom environment is likely to be expressed through repetitive lack of compliance to rules, as it has already been shown in the Cross Case study analysis chapter (p.112).

It was also assumed though that the difficulty to cope with the teacher's criticism was partially linked (with the exception of the pupil with AD/HD) to Emotional Perception and Appraisal ability, in terms of evaluating properly the negative comments the pupils received and showing improvement. Pupils, as evidenced in Vasilis' (p.95) and Anastasia's Case study (p.82), who often received negative criticism by the teacher faced more difficulties, compared to their classmates to comply to classroom rules and such difficulties were mainly expressed by adopting inappropriate behaviors and interrupting teaching.

Lack of compliance to classroom rules, being a part of Pupil Discipline, has already been linked in former studies to EI and in particular to Socio-Emotional Learning programs and supportive teachers (Osher et al., 2008). In the same vein, prior research also supports the importance of compassionate relations between teachers and pupils (Hamre et al., 2006; Hawkins et al., 1998; Osterman, 2000), as the teacher's positive comments concerning pupil's performance shows to have a positive impact on a pupil's intention to comply with school rules.

As a result, by drawing on prior literature in the field and critically examining the findings from the present study, we could elicit the conclusion that the relation between EPA and School stress Management/Compliance to rules is influenced by the level of EPA each pupil indicates, the adoption of effective stress managing strategies and the relationship between the pupil and the teacher. This last claim arises from the analysis of Anastasias' and Vasilis' Case study, which revealed that the unsupportive attitude of the teacher fostered the adoption of ineffective strategies by pupils when coping with school stress.

#### **4.1.3 Self – esteem / Self confidence in relation to Trust in abilities and knowledge**

As shown in Figure 4.1, the sub-theme of ‘Self- Esteem’ was shown to relate to the sub-theme of Pupil Performance/Trust in abilities and knowledge. Indeed, Self-Esteem and Self-confidence were evidenced as subthemes in the majority of the Case studies, as was presented thoroughly in the cross Case analysis (see for example Stratos’, Vasilis’, Anastasia and Yiannis’ Case studies and Cross-Case analysis, p.108).

Self-esteem is a crucial construct that is consistently connected to school life and more specifically school performance and motivation (Chu and Choi, 2005; Marsh et. al., 2005; Valentine et al., 2005). Drawing on prior literature, much research has validated so far the assumption that the higher level of self-esteem a pupil has built, the higher achieving he or she becomes (Marsh, Byrne and Yeung, 1999). Moreover, a positive self-concept is a beneficial factor in the way of children’s personal development (Branden, 1994). In the same vein, the Case studies revealed different levels of Self-esteem, which influenced in various ways pupils’ trust in their abilities and knowledge and ultimately their attainment. As evidenced from the Case studies, pupils who had developed a strong concept of self-esteem tended to trust their knowledge and that belief made them eager to participate. As a result their performance improved as did their intrinsic motivation for participation. Here we could support the idea that a potential relationship between Self-esteem, Trust in abilities and knowledge and Intrinsic Motivation arises (see also Case study Anastasia, p.81).

Furthermore, it was elicited from the data analysis that pupils who have presented a realistic framework of self-esteem through questionnaires where they pointed out the good and the weak points concerning their attainment, seemed to improve their performance by focusing on the areas they faced more difficulties in as well as strengthening the trust in the areas of knowledge they felt more capable in (Stratos’ Case study, p.76). Gage and Berliner (1992) noted that research on the relationship between self-esteem/self-concept and school achievement could be an important factor for school success and in particular in school subjects like Language, Mathematics and Science.



On the contrary, pupils who have indicated low levels of Self-esteem during the observations and the completion of the questionnaire, were more likely not to trust their abilities and tended to avoid exercises and complain systematically when new tasks were set. This behavior seemed to influence negatively both their performance and the teacher's stance towards them, which led to negative criticism in some Cases (e.g. Anastasia's Case study). In the literature it is noted that positive self-esteem has also quite a positive impact on teachers' attitudes (Helm, 2007). Other studies shed light on the influence of the relationship between teacher and pupils by revealing that it is associated to positive effects on academic self-concept (Garcia-Reid et al., 2005).

An intriguing point made through the Cases presented in Chapter 3 is that some pupils seemed to demonstrate high self confidence during teaching and observations, yet when completing the questionnaire and attending the personal interview they approached their self-esteem in an entirely different way. It is assumed that these pupils have constructed two frameworks of self-esteem: one for their social life and another for their personal frame of reference. Previous studies have shown that young students tend to be incapable of accurately expressing their self-esteem and describing their abilities (Schunk and Pajares, 2002). Although in class they have indicated high levels of participation, answering eagerly their teacher's question and showing self-confidence in their answers, at the same time they admitted during interviews that they often feel uncertain, fearful and stressed. It is obvious that these pupils have presented a misleading self image to their teacher and classmates. This assumption though should be also examined under the prism of learning difficulties and more specifically AD/HD, which often leads pupils to react inappropriately and impulsively. This could be a topic for future research exploration.

To conclude this section, self-esteem seems to relate to pupil performance in terms of the fact that pupils with higher self confidence seemed to perform better in class and those with lower levels faced more difficulties in trusting their abilities and knowledge. A factor which undoubtedly influenced the results of this study is pupils' learning difficulties as their performance was often influenced by their difficulties in key subjects. There is evidence that suggests that students with learning difficulties tend to develop

low self-esteem (Lyons, 2012). Studies also reveal that pupils with LD have lower self-esteem compared to pupils without LD (Moller et al., 2009).

## Summary

This first part of the discussion has attempted to reveal and critically analyze the relationships of particular sub-themes of EI and Pupil Performance. To answer the first research question 'If and how EI affects Pupil Performance, the findings of the study, as discussed in the current chapter, would seem to indicate that EI does seem to influence Pupil Performance in pupils with learning difficulties. Drawing together the findings and the aforementioned discussion of these, it may be useful to proceed to discussing the concept of the emotional intelligent pupil..Emotionally intelligent pupils, as evidenced in the present study, seem to be able to manage one's emotions, assess one's and other's emotions, stay open to praise and criticism and be able to create a realistic framework of self-esteem. These pupils achieved more in class compared to the pupils of the sample who indicated lower Emotional Perception, were not influenced by teacher's comments either positive or negative and did not have a strong belief in themselves. Better performance has been expressed as effective managing of emotions, showing trust in abilities and knowledge, complying to classroom rules and showing eagerness to participate in classroom activities. The result aligns with the findings of Edun and Akanji (2008) whose study showed that self-esteem and intelligence could be an important predictor of performance in junior secondary school.



**Figure 4.2: Pupils filling out the questionnaires**

Although the current study is based on a small sample of pupils in a single context of a Greek primary school, it raises some important questions regarding the integration of EI as an organizing concept in the school curricula and in teachers' practice.

## **4.2 Towards a framework of concern**

The ultimate aim of the present study is to propose a framework of concern regarding the way the concept of EI may be integrated within Greek schools. Being a teacher myself I understand the difficulties an educator faces when it comes to meeting the diverse needs of the pupils. This model attempts to shed light on the integration of EI construct within daily teaching in order to improve pupil's attainment. It is based on Social and Emotional Learning theories which propose that teachers, counseling and educational psychologists could encourage the development of appropriate counseling intervention programs and enabling environments.

Social and Emotional Learning (SEL) as it is presented in Chapter 1, is the process through which children and adults gain the knowledge, attitudes, and skills connected to social and emotional aspects. The main categories of SEL programs are: Self-Awareness, Social Awareness, Relationship Skills and Responsible Decision-making (Collaborative for Academic, Social, and Emotional Learning, 2003). These principles are the basis of SEL programs which foster pupils improvement in personal life and academic level. Thus these programs are quite promising to promoting positive adjustment and enhancing performance (Diesktra, 2008; Greenberg et al., 2003; Weissberg, Kumpfer, and Seligman, 2003; Zins et al, 2004).

Based on these principles and on the findings of the current study it is attempted here to build a potential school integrating framework concerning specific components of EI that also reflect Pupil Performance. The present study has focused on pupils with specific learning difficulties and thus guidelines will mostly aim at suggesting to teachers a framework of concern for this population. Thus it involves special teaching strategies under the following headings: EI in Language and Mathematics, Classroom

Management, Pupils' Relationships and Pupil's Assessment. Below I will attempt to shed light on these components and propose specific techniques that could be part of a crucial change in current curricula.

#### ***4.2.1 EI in Language and Mathematics***

One of the most challenging aspects of EI is to be integrated within school curricula and more specifically within the teaching of specific school subjects. The present subsection will focus on effective SEL techniques that could be incorporated in Language and Mathematics subjects. Regarding Language, subject teaching processes involve the development of reading comprehension skills, practice on grammar and syntax, improvement of vocabulary and written expression. Findings of a recent study have indicated that there was a significant relationship between pupil's EI and their language achievement (Abdolrezapour and Takavoli, 2012). Teaching Language subject to pupils with learning difficulties could be a demanding and stressful job for teachers. Drawing on the theoretical discussion of section 4.1, it could be suggested that the teacher could foster pupil's emotional perception and appraisal through texts that examine emotional reactions of the protagonists under specific circumstances. A good example of that technique could be the second activity of the questionnaire (p.2-3). In that way, pupils could improve their performance and be able to manage the stress caused by difficulties in the particular subject.

Concerning Mathematics, findings from another study have shown that EI facets, like Adaptability and Intrapersonal abilities, could influence Problem-solving behaviour, study habits, Information processing and Mathematics anxiety (Pajares, 2005). Pupils who have specific learning difficulties like dyscalculia face often severe difficulties in the above mentioned areas. Teachers could promote the use of Emotion to facilitate thinking (second branch of Mayer's and Salovey model) so as to help their pupils to employ emotional thought and respond to cognitive challenges like a mathematical problem. Even if this seems like a theoretical technique, in the Case that teachers are able to incorporate it in their the daily teaching routine, pupils would gradually be able to adopt appropriate strategies in order to respond to cognitive challenges and decrease mathematics anxiety.

### **4.2.2 Classroom Management**

Nowadays, teacher training focuses on inclusive education as it has been made clear during the last decade that pupils have different needs, strengths and weaknesses. Effective classroom management includes a wide range of aspects that should be paid attention to, such as encouraging pupils to respect the rules of the classroom, dealing with behavioural problems, fostering intrinsic motivation, dealing with antagonism between pupils and many more. The challenges arising when trying to manage a class are numerous. This short review would focus on Emotional Management of the classroom regarding improvement of performance.

Thus the majority of teachers attempt to implement differentiated teaching. Inclusion though refers not only to classroom management but to Emotional Management as well. This incorporation of EI regarding differentiated instruction aspires to train teachers to be flexible during teaching process in order to train their pupils to be open to feelings of oneself and others. This technique could be beneficial for pupils who often experience failure due to their learning difficulties. As it was shown in 4.1 Chapter, Emotional Openness could also affect positively to pupil's Distraction. Encouraging pupils to express their thoughts and emotions could reinforce their eagerness to stay focused during teaching and thus improve their performance. To begin with some useful techniques could be to ask pupils every morning to come together and feel as community members by greeting each other and sharing their news. The aim is to create an active and engaging learning framework for pupils.

Additionally the teacher should use positive words and tone to promote this sense of community and self-discipline of the pupils. Findings of the present study have shown that compliance to rules is connected to Emotional perception and appraisal. This claim is related to lack of empathy and weak social skills of pupils with learning difficulties. As a result they often misinterpret the teacher's intention to support them through useful feedback (Goleman, 2000) and in that way their Intrinsic Motivation for participation weakens. Encouraging them to express their feelings by creating a supportive environment could have positive effects on a wide range of skills.

### **4.2.3 Pupils' Relationships**

The school classroom is a lively community in which personal relationships play a crucial role. This sub-theme of the current framework concerns Relationship and Interpersonal skills and more specifically relates EI to Emotional Perception.

A sizable proportion of pupils with learning difficulties reveals low levels of Emotional Perception, often facing difficulties in developing positive social relationships with their peers. This interaction is described by the term Social Perception (Semrud-Clikeman and Hynd, 1991). Problematic interactions could lead to lack of ability in accurately reading social messages. In the same vein, teachers often report that pupils with LD tend to be less cooperative and communicative.

Although meta-analysis has found limited positive effect of intervention on social behaviour (Kavale et al., 1997), an effective strategy could be to reinforce team collaborating teaching so as to promote friendships and collegiality. Using role-playing and encouraging active listening make pupils feel part of a team, improves their social skills, their team spirit, their cooperation capacities and ultimately, their empathy. Furthermore, due to these techniques pupils accept others' differences and appreciate what each person could add to the group as a whole.

Moreover, they could improve their emotional perception and are more likely to adopt and reproduce these behaviours in other settings. It would seem that this strategy assists pupils to improve their relationships not only at school but also in their out-of-school social life. Furthermore, when the teacher establishes a positive, social and enabling environment within class he fosters pupils who have difficulties to ask assistance from their classmates and not feel marginalized. Thus the good results are twofold: pupils with LD improve their performance and pupils without LD improve their empathy skills. Both groups though promote their collaborating skills and social behaviours.

#### **4.2.4 Pupil's Assessment**

Assessment plays an important role in classroom and diversity of tools and techniques used in the Case of pupils with LD could be one way forward. As pupils with learning difficulties often perform worse to their classmates, teachers might employ assessment strategies that would help them manage their school stress and increase their trust in their abilities and knowledge while also boosting their self-esteem. Instead of progress tests and notes, teachers could adopt other effective assessing strategies aiming at helping their pupils gain knowledge of their strengths and weaknesses.

Some indicative strategies could be: Brainstorming, Concept Maps, Decision Making, Quick Thinking and Reflection (Canas et al., 2003; Frangenheim, 2005; Jesson, 2012). For example, the basic components of Brainstorming is to pose an open-ended question to pupils in order to share their ideas, challenge themselves, correct any misconceptions and summarize the key points. In this way, critical thinking is promoted and pupils develop their imagination. Concept maps could be an extremely useful tool especially for children with LD who face difficulties in generalization and conceptualization. This strategy asks pupils to visualize patterns of and creatively explore the discussed topic. It is also a strategy that fosters cross-curricular instruction and provides feedback to the teacher concerning pupil's understanding. Education towards emotional programs becomes more powerful when it is reinforced across all of the contexts where children spend their time (CASEL, 2013).

Decision Making requires collaborative teaching, which has been introduced in the previous section and provides pupils with a problem that they have to work on by taking up different roles. This strategy enables the teacher to keep the whole class active and promotes the integration of ideas while pupils are asked to respond to cognitive challenges.

A technique that is gaining popularity in teaching the last years is Quick Thinking. It is about a short term procedure that lasts only 5-10 minutes. During this short time pupils could be asked to correct a statement, complete a reasoning or paraphrase given material. This technique aims at helping pupils especially with LD to manage time, remain attentive and control their anxiety.

Last but not least, an important point for any educator is grading the pupils of his class. Although Greek curricula at the moment is not flexible concerning the grading system, this model proposes that instead of notes, teachers of primary school could choose descriptive assessment. This term is about using an analytical description of pupils' strengths and weaknesses regarding each subject.

An example could be :

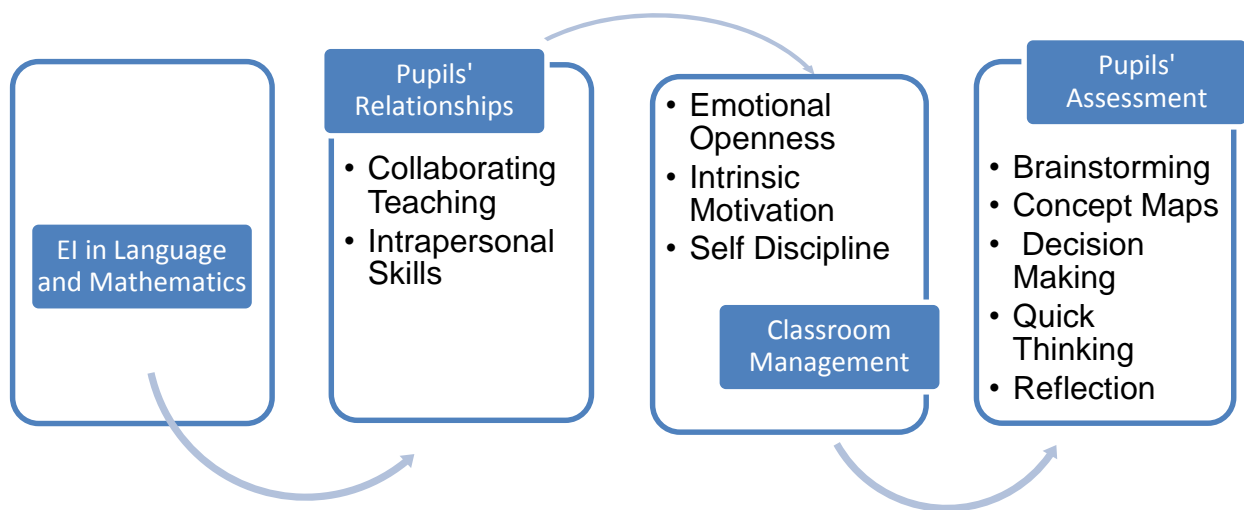
**Table 4.1: Proposal of descriptive assessment**

Subject	Traditional grading	Proposed assessment
Language	B	<p>You are really good at dictation and spelling.</p> <p>You should try harder though concerning reading comprehension.</p> <p>I would also appreciate it if you were participating more during collaborating teaching and were eager to cooperate with your classmates.</p> <p>Go on and try harder!</p>

In that way pupils could use the valuable feedback to identify their weaknesses. At the same time competitiveness would not be promoted in a negative way through comparison of grades. It could be that such a differentiation in the grading system would change how pupils perform in a drastic way.

An attempt to visualize this framework is presented below:





**Figure 4.3: Conceptualising a framework of concern**

The current study could lead to such a tentative framework of concern that would best be improved by further research in the area. The extension of current knowledge in the field of EI and Pupil Performance could bring crucial changes in education and reform the way teachers instruct pupils with or without learning difficulties. There is still much to learn about how best to implement and support school-wide Emotional Programmes but the current study clearly demonstrates its value in promoting the social, emotional, and academic development of school children.

## CONCLUSION

The closing section of this thesis presents the main conclusions of the current study and its limitations followed by implications and recommendations for further research.

Improving the quality of education has been at the heart of education research throughout the world. In this paper we presented evidence showing that investigating the relationship of EI and Pupil Performance could provide a new framework in primary education. Specifically, in the present study it has been examined the impact of EI on Pupil Performance as evidenced in one classroom of primary school children with learning difficulties and found that EI can have a positive effect on pupils' performance referring to Language and Mathematics subjects.

More specifically, we found that Emotional Distraction is linked to Openness to Success and Failure and Intrinsic Motivation for Participation and additionally Emotional Perception relates to Lack of compliance in classroom rules and School Stress Management. We also found that Trust in abilities and knowledge is positively affected by Self-esteem.

These positive effects on pupil performance provides some empirical evidence on some of the ways by which increasing EI of pupils with learning difficulties could affect positively their performance and overall their behavioral skills in school (Bracket, Rivers, and Salovey, 2011) und ultimately in life. Increasing pupils' EI in relation to their performance is a complicated and continuous procedure which could be fostered by the integration of a framework of concern that incorporates the aspects of EI and Pupil Performance. It is important, however, to mention that pupil performance is also influenced by various other factors like communication, learning facilities, proper guidance and family stress (Robert and Sampson, 2011; Noble, 2006), which should be taken under consideration in any intervention or pilot program that is implemented within the classroom environment.

The evidence of this study therefore implies that expanding such a framework of EI within Greek schools could be an effective strategy to improve performance in pupils

with learning difficulties in order to increase pupils' performance. In the same vein, special attention should also be drawn to teachers' training regarding behavioural management in the classroom. In order to achieve a holistic view of the aforementioned framework, there should be more studies aiming at investigating teacher's attitudes and deficits in their training in order to be more effective during teaching. Current studies have shown that teachers tended to concentrate more on individual student behavior when describing behavior management strategies than on group or schoolwide behavior (Tillery et al., 2010).

Below there is an attempt to focus on the basic limitations of the current study as well as to propose some implications for further research.

### ***Limitations of the study***

The current study has several limitations that are here discussed. Firstly, the findings and their discussion have been based on a limited sample of 13 primary pupils with learning difficulties in Greece, a fact that could restrict the generalization of the findings.

In addition, because of the small number of participants, it was not possible for the current study to investigate gender differences between EI and Pupil Performance, which could have potentially masked some of the findings. To be more specific, Brackett et al. (2004) found that EI predicted social deviance only for males. Bigger scale studies that could be conducted in the field of EI and Pupil Performance would highlight such differences. With regards to the sampling we could also point out that pupils had a medium to high socioeconomic status and therefore pupils in more disadvantaged contexts may not be represented as much with regards to the findings (see Tiwari and Srivastava, 2004). The small sample, however, was justified through the focus of the research, its in-depth qualitative methodology, naturalistic design and therefore, specific focus on contextual elements impacting on the pupils (teaching, pupil relations and overall classroom context).

Going further, another limitation of the study could be the absence of a control group. Yet, the study was designed in such a way as to focus on a particular sample (pupils

with LD) for a longer period of time (8 weeks). Time restrictions regarding school/classroom access and ethical issues regarding not pinpointing specific students (with LD) as the focus of the research, seemed to lead the way towards focusing on one classroom/cohort of pupils, rather than aiming towards a comparison between groups. Another limitation could arise from the use of the particular research tools. To be more specific, the wealth of information collected through the observation protocols and their design as a result, did not allow me to observe a large sample. In addition there was always the disadvantage that some content of interest would be missed. To partially counteract this, I employed the ABC table which has been analysed in Chapter 2 that provided me with more structured data.

Concerning the questionnaires, they needed to be kept short to help pupils recall important information. Due to that, I attempted to design the questionnaires in a concise way and represent a wide range of the elements of the two pylons of the study. Last but not least, with regards to the interviews, pupil's answers may have been in accordance with what is socially desirable or may have included a large amount of unnecessary information due to open-ended items. Indeed this happened in some Cases and the researcher attempted to elicit the data that referred to EI and Pupil Performance through focused analysis.

### ***Implications for Future Research***

The information on the incorporation of EI in primary education aiming at improving pupil performance in pupils with LD is limited, yet it could have a beneficial role for fostering success in school. Thus more studies need to be conducted before the implementation of such frameworks will be considered as evidence based practice.

A possible implication concerning future research could be to replicate the findings with a larger and more heterogeneous sample of pupils. This study also raised a number of interesting questions for future research: Why only specific components of EI seemed to affect Pupil Performance? Does teachers' EI affect pupils' EI in terms of school success? What is the impact of EI on standardized tests in various school subjects? A pilot intervention for an EI program could be integrated in a specific number of schools and investigate the in vivo impact on pupils' achievement and behaviour. Further, could

El skills be taught via an intervention program? In answering such challenging questions, we could be on the threshold for a crucial change in school curricula that would be equally beneficial for pupils with learning difficulties and the general population.

## REFERENCES

- AbiSamra, N. (2000). The Relationship between Emotional Intelligence and Academic Achievement in Eleventh Graders. *Research in Education, FED*, 661, 620-661.
- Abdolrezapour, P., & Takavoli, M. (2012). The relationship between Emotional Intelligence and EFL learners achievement in learning comprehension. *Innovation in Language Learning and Teaching*, 6(1), 1-13.
- Adeyemo, C. (2005). Test anxiety, cognitions, study habits and academic performance: A perspective study. *Advances in Test Anxiety Research*, 7, 221-41.
- Adeyemo, D.A. (2007). Moderating influence of emotional intelligence on the link between academic self-efficacy and achievement of University students. *Psychology and Developing Societies*, 19(2), 199-213.
- Agraphia [Def.1].(2013). In the *The Free Dictionary by Farlex*, Retrieved August 28, 2015, from <http://www.thefreedictionary.com/agraphia>.
- American Association on Mental Retardation (1992). Mental retardation: Definitions, classification and systems of supports (9th ed.). Washington, DC: American Association on Mental Retardation
- American Psychiatric Association (1994). *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)* (4th ed.). Washington DC: APA.
- American Psychiatric Association (2013). *Diagnostic and Statistical Manual of Mental Disorders (5th ed.)*. Arlington, VA: American Psychiatric Publishing.
- American Psychiatric Association (1994). *Diagnostic and statistical manual of mental disorders (4th ed.)*. Washington, DC: American Psychiatric Association.

Aremu, A.O. (2004). Psychological and Sociological determinant of academic achievement of Nigeria Adolescents. *Ife Psychologia, An International Journal of Psychology in Africa*, 12 (2), 149-161.

Arhar, J.M., Holly, M.L., & Kasten, W.C. (2001). *Action research for teachers: Traveling the yellow brick road*. Upper Saddle River, NJ: Merrill/Prentice Hall.

Arksey, H., & Knight, P. (1999). *Interviewing for Social Scientists*. London: Sage.

Baird, G., Scott, W., Dearing, E., & Hamill, S. (2009). Cognitive self-regulation in youth with and without learning disabilities: Academic self-efficacy, theories of intelligence, learning versus performance goal preferences, and effort attributions. *Journal of Social and Clinical Psychology*, 28, 881–908.

Bandura, A. (2001). Social cognitive theory: an agentic perspective. *Annual Review of Psychology*, 52, 1-26.

Barkley, R.A., Fischer, M.S., Fletcher, L., & Kenneth, B. (2002). The persistence of attention-deficit/hyperactivity disorder in to young adulthood as a function of reporting source and definition of disorder. *Journal of Abnormal Psychology*, 111(2), 279-289.

Bar-On, R. (1997a). *The Emotional Quotient Inventory (EQ-i): A test of emotional intelligence*. Toronto, Canada: Multi-Health Systems, Inc.

Bar-On, R. (2002). *EQ-i: Bar-On emotional quotient inventory technical manual*. Toronto, Canada: Multi-Health Systems.

Bar-On, R. (2006). The Bar-On model of emotional-social intelligence (ESI). *Psicothema*, 18, 13-25.

Bar-On, R., & Parker, J. D. A. (2000). *The Bar-On Emotional Quotient Inventory: Youth Version (EQ-i:YV) Technical Manual*. Toronto, Canada: Multi-Health Systems, Inc.

- Barron, K.E., & Harackiewicz, J.M. (2001). Achievement goals and optimal motivation: Testing multiple goal models. *Journal of Personality and Social Psychology*, 80, 706-722.
- Bastian, V. A., Burns, N. R., & Nettelbeck, T. (2005). Emotional intelligence predicts life skills, but not as well as personality and cognitive abilities. *Personality and Individual Differences*, 39, 1135-1145.
- Bellet, P. S., & Maloney, M. J. (1991). The importance of empathy as an interviewing skill in medicine. *JAMA* 226(13), 183.
- Bensoussan, M. (2012). Alleviating Test Anxiety for Students of Advanced Reading Comprehension. *RELC Journal*, 43(2), 203–216.
- Berninger, V., & Wolf, B. (2009a). *Teaching students with dyslexia and dysgraphia. Lessons from teaching and science*. Baltimore: Paul H. Brookes Publishing.
- Berninger, V., & Wolf, B. (2009b). *Helping students with dyslexia and dysgraphia make connections. Differentiated instruction lesson plans in reading and writing*. Baltimore: Paul H. Brookes Publishing.
- Bracket, M. A., Rivers, S. E., & Salovey, P. (2011). Emotional intelligence: Implication for personal, social, academic & workplace success. *Social and Personality Psychology*, 5 (1), 88-103.
- Brouzos, A., Misaitidi, A., & Hadjimatheou, A. (2014). Associations Between Emotional Intelligence, Socio-Emotional Adjustment, and Academic Achievement in Childhood: The Influence of Age. *Canadian Journal of School Psychology*, 29 (2), 83--99.
- Blomert, L., & Mitterer, H. (2004). The fragile nature of the speech-perception deficit in dyslexia: Natural vs. synthetic speech. *Brain and Language*, 89,21-26.



Boyatzis, R.E., Goleman, D., & Rhee, K. (1999). Clustering competence in emotional intelligence: *Insights from the Emotional Competence Inventory (ECI)*. Handbook of Emotional Intelligence. R. Bar-On and D. A. Parker. San Francisco: Jossey Bass.

Brackett, M.A. & Mayer, J.D. (2003). Convergent, discriminant and incremental validity of competing measures of emotional intelligence. *Personality and Social Psychology Bulletin*, 29, 1147-1158

Brackett, M. A., Mayer, J. D., & Warner, R. M. (2004). Emotional intelligence and its relation to everyday behaviour. *Personality and Individual Differences*, 36, 1387 -1402.

Branden, N. (1994). *The six pillars of self-esteem*. New York: Bantam Books.

British Psychological Society. (2005). *Dyslexia, Literacy and Psychological Assessment*. Leicester: The British Psychological Society

Brown, P. A. (2008). A Review of the Literature on Case Study Research. *Canadian Journal for New Scholars in Education*, 1(1), 8.

Bussing, R., Schoenberg, N. E., & Perwien, A. R. (1998). Knowledge and information about ADHD: Evidence of cultural differences among African American and White parents. *Social Science in Medicine*, 46(7), 919-928.

Canas, A.J., Coffey, J.W., Carnot, M.J., Feltovich, P., Hoffman, R.R., Feltovich, J., & Novak, J.D. (2003). A Summary of Literature pertaining to the use of concept mapping techniques and technologies for education and performance support. A report prepared for the Chief of Naval Education and Training, Pensacola, FL. Retrieved on March 15, 2016 from <http://www.ihmc.us/users/>

Caprara, G.V., Barbaranelli, C., Pastorelli, C., Bandura, A., & Zimbardo, P.G. (2000). Prosocial foundations of children's academic achievement. *Psychological Science*, 11, 302-306.

- Carter, P., & Welner, K.G. (2013). *Closing the Opportunity Gap: What America must to do give every child an even chance*. New York, NY: Oxford University Press.
- Ciarrochi, J.V., Chan, A.Y & Caputi, P. (2000). A critical evaluation of emotional intelligence concept. *Personality and Individual Differences*, 28, 539-561.
- Ciarrochi, J.V., Deane, F.P., & Anderson, S. (2002). Emotional intelligence moderates the relationship between stress and mental health. *Personality and Individual Differences*, 32, 197–209.
- Cicchetti, D., & Toth, S.L. (1998). The development of depression in children and adolescents. *American Psychology* , 53, 221-241.
- Cherniss, C. (2004). Intelligence, Emotional. In C.D. Spielberger (ed.) *Encyclopedia of Applied Psychology*, vol. 2 (pp.315-319). Amsterdam: Elsevier.
- Childress, A.C., & Berry, S.A. (2012). Pharmacotherapy of attention-deficit hyperactivity disorder in adolescents. *Drugs*, 72, 309–25.
- Chivers, M. (1991). Definition of Dysgraphia (Handwriting Difficulty). Dyslexia A2Z. Retrieved from [http://www.dyslexiaa2z.com/learning\\_difficulties/dysgraphia/dysgraphia\\_definition.html](http://www.dyslexiaa2z.com/learning_difficulties/dysgraphia/dysgraphia_definition.html).
- Choi, J.N., & Moran, S.V. (2009). Why not procrastinate? Development and validation of a new active procrastination scale. *The Journal of Social Psychology*, 149(2), 195-211.
- Chu., A.H.C., & Choi, J.N. (2005). Rethinking procrastination: Positive effects of “active” procrastination behavior on attitude and performance. *The Journal of Social Psychology*, 145(3), 245-264.

- Collaborative for Academic, Social and Emotional Learning (CASEL) (2003). Retrieved September 8, 2015, from <http://www.casel.org/guide/>.
- Collaborative for Academic, Social and Emotional Learning (CASEL) (2008). Retrieved October 10, 2015, from <http://www.casel.org/guide/>.
- Collaborative for Academic, Social and Emotional Learning (CASEL) (2011). Retrieved December 12, 2015, from <http://www.casel.org/guide/>.
- Collaborative for Academic, Social and Emotional Learning (CASEL) (2013). Retrieved March 10, 2015, from <http://www.casel.org/guide/>.
- Coleman, A. (2008). *A Dictionary of Psychology*. Oxford University Press.
- Coleman, J.S., & Hoffer, T. (1987). *Public and private high schools: The impact of communities*, New York, NY: Basic Books.
- Coleman, J.S., Hoffer, T., & Kilgore, S. (1982). *High school achievement: Public, catholic, and private schools compared*. New York, NY: Basic Books.
- Colley, A., Comber, C., & Hargreaves, D.J. (2003). School subject preferences of pupils in single sex and co-educational secondary schools. *Educational Studies*, 20(3), 379-385
- Conte, J. M. (2005). A review and critique of emotional intelligence measures. *Journal of Organizational Behavior*, 26, 433-440.
- Corrie, C. (2003). *Becoming Emotionally Intelligent*. Stafford: Network Educational Press Ltd.
- Creswell, J. (1998). *Research design: Qualitative, quantitative, and mixed methods approaches* (2nd ed.). Thousand Oaks, CA: SAGE Publications.

- Creswell, J. (2003). *Research design: Qualitative, quantitative and mixed methods approaches* (2nd ed.). Thousand Oaks, CA: SAGE Publications.
- Crotty, M. (1998). *The foundations of social research*. Thousand Oaks, CA: SAGE Publications.
- Dahan, O., & Meltzer, Y. (2010). The dilemmas raised in LD support centers in higher education. *Mofet Journal*, 42, 44–48.
- Darwin, C. (1871). *The descent of man, and selection in relation to sex*. London: John Murray.
- Darwin, C. (1965). *The expression of the emotions in man and animals*. Chicago: University of Chicago Press. (Original work published 1872)
- DeLisi, M. (2014). Chapter 10: Low Self- Control Is a Brain- Based Disorder. Thousand Oaks, CA: SAGE Publications Ltd.
- Denzin, N.K., & Lincoln, Y.S..(2005). Introduction: The discipline and practice of qualitative research. In N.K. Denzin & Y.S. Lincoln (Eds.), *The Sage handbook of qualitative research* (pp. 1-28). Thousand Oaks, CA: SAGE Publications.
- Department of Health. (1998). *Signposts for Success in Commissioning and Providing Health Services for People with Learning Disabilities*. Department of Health, London
- Deponio, P. (2005). The co-occurrence of specific learning difficulties: implications for identification and assessment. In G. Reid, & A. Fawcett (Eds.), *Dyslexia in Context: Research Policy and Practice* (pp.323-333). London: Whurr Publishers.
- Diamond, A. (2013). Executive functions. *Annual Review of Psychology*, 64, 135–68.

Diekstra, R.F.W. (2008). *Effectiveness of school-based social and emotional education programmes worldwide. In Social and emotional education: An international analysis* (pp. 255-312). Santander, Spain: Fundacion Marcelino Botin

Dika, S.L., & Singh, K. (2002). Application of social capital in educational literature. A critical synthesis. *Review of Educational Research*, 72, 31-60.

Ditton, H., Krüsken, J., & Schauenberg, M. (2005). Bildungsungleichheit – der Beitrag von Familie und Schule. *Zeitschrift für Erziehungswissenschaft*, 2, 285-304.

Domina, T. (2005). Leveling the home advantage: Assessing the effectiveness of parental involvement in elementary school. *Sociology of Education*, 78, 233-249.

Dorset Research and Development Support Unit. (2003). Emotional processing. Retrieved from <http://www.emotionalprocessing.org/emotion%20concepts>.

Duane, D. (2002, August). *Dyslexia ADHD and Non Verbal Learning Disorders*. Papers presented at Police on Dyslexia conference, Uppsala, Sweden.

Duckworth, A & M Seligman 2005 Self-Discipline Outdoes IQ in Predicting Academic Performance of Adolescents. *Psychological Science*, 16, 12, 939-944.

Dulcan, M.K., & Lake, M.B. (2012). *Concise guide to child and adolescent psychiatry*. (4th ed). American Psychiatric Publishing: Inc, Arlington (VA).

Durlak, J. A., & Dupre, E. . P. (2008). Implementation matters: A review of research on the influence of implementation on program outcomes and the factors affecting implementation. *American Journal of Community Psychology*, 41, 327–350.

Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D. & Schellinger, K. B. (2011), The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development*, 82, 405–432.

Dyscalculia. (2015, January 16). Retrieved 13 September, 2015, from <http://www.bdadyslexia.org.uk/dyslexic/dyscalculia>.

Eastabrook, J. M., Duncan, A., & Eldridge, B. (2005). Academic success in elementary school: Does EI matter?. Paper presented at the annual meeting of the Canadian Psychological Association, Montreal, Quebec.

Edun, T., & Akanji, S.O. (2008) Perceived self efficacy, academic self regulation and emotional intelligence as predictors of academic performance in junior secondary school. *International journal of educational research*, 4(1), 61-72.

Ehmke, T., Siegle, T., & Hohensee, F. (2005). Soziale Herkunft im Ländervergleich. In M. Prenzel, J. Baumert, W. Blum, R. Lehmann, D. Leutner, M. Neubrand, R. Pekrun, J. Rost, & U. Schiefele (Eds.), *PISA 2003. Der zweite Vergleich der Länder in Deutschland – Was wissen und können Jugendliche?* (pp. 235-267). Muenster: Waxmann.

Eisenberg, N., Fabes, R. A., & Spinrad, T. L. (2006). Prosocial behavior. In W. Damon, R. M. Lerner & N. Eisenberg (Eds.), *Handbook of child psychology: Social, emotional, and personality development* (pp. 646–718). New York: John Wiley.

Eisenhardt, K. (1989). Building Theories from Case Study Research. *Academy of Management Review*, 14(4), 532-550.

Elias, M. J., Zins, J. E., Weissberg, R. P., Frey, K. S., Greenberg, M. T., Haynes, N. M., et al. (1997). *Promoting social and emotional learning: Guidelines for educators*. Alexandria, VA: Association of Supervision and Curriculum Development.

Elias, M. J. (2004). The connection between social-emotional learning and learning disabilities. Implications for intervention. *Learning Disability Quarterly* 27 (1), 53–63.

Elliot, A.J. & McGregor, H.A. (2001). A 2x2 achievement goal framework. *Journal of Personality and Social Psychology*, 80, 501-519.

Emmerling, R.J., & Goleman, D. (2003). *Emotional intelligence: Issues and common misunderstandings: Issues and common misunderstandings*. Retrieved June 16, 2016 from [www.eiconsortium.org](http://www.eiconsortium.org).

Fan, X., & Chen, M. (2001). Parental involvement and students' academic achievement: A meta-analysis. *Educational Psychology Review*, 13(1), 1-22.

Fani, T. (2015). The relationship between Emotional Intelligence and English Reading Comprehension Ability. Hamburg: Anchor Academic Publishing.

Fatum, B.A. (2008). The relationship between emotional intelligence and academic achievement in elementary-school children. (Unpublished doctoral dissertation). Ohio State University, USA.

Ferrando, M., Prieto, M.D., Almeida, L. S., Ferrandiz, C., Bermejo, R., Lopez-Pina, J.A., Hernandez, D., Sainz, M., & Fernandez, M.C., (2010). Trait emotional intelligence and academic performance: Controlling for the effects of IQ, personality & self-concept. *Journal of Psychoeducational Assessment*, 29, 150-59.

Fletcher, J.M., & Loveland, K. (1986). Neuropsychology of arithmetic disabilities in children. *Focus on Learning Problems in Mathematics*, 8, 23-40.

Frangenheim, E. (2005). *Introduction. In Reflections on Classroom Thinking Strategies: Practical Strategies to Encourage Thinking in Your Classroom*. Thousand Oaks, CA: SAGE Publications.

Frazier, T.W., Youngstrom, E.A., Glutting, J.J., & Watkins, M.W. (2007). ADHD and achievement: Meta-analysis of the child, adolescent, and adult literatures and a concomitant study with college students. *Journal of Learning Disabilities*, 40, 49–65.

Frith, U. (1997). Brain, mind and behaviour in dyslexia. In C. Hulme & M. Snowling (Eds.), *Dyslexia: biology, cognition and intervention* (pp.1-19). London: Whurr Publishers.

- Gage, N., & Berliner, D. (1992). *Educational psychology* (5th ed.). Boston: Houghton Mifflin.
- Garcia-Reid P., Reid R., & Peterson N. (2005). School engagement among Latino youth in an urban middle school context. *Education & Urban Society*, 37( 3), 257–275.
- Geary, D.C., Bow-Thomas, C.C., & Yao, Y. (1992). Counting knowledge and skill in cognitive addition: A comparison of normal and mathematically disabled children. *Journal of Experimental Child Psychology*, 54, 372–391.
- Geary, D.C., Hamson, C.O., & Hoard, M.K. (2000). Numerical and arithmetical cognition: A longitudinal study of process and concept deficits in children with learning disability. *Journal of Experimental Child Psychology*, 77, 236–263.
- Gentile, J.P., Atiq, R., & Gillig, P.M. (2006). Adult ADHD: Diagnosis, Differential Diagnosis, and Medication Management. *Psychiatry*, 3(8), 25–30.
- Gersten, R., Clarke, B., & Mazzocco, M. (2007). Historical and contemporary perspectives on mathematical learning disabilities. In D.B. Berch & M.M.M. Mazzocco (Eds.), *Why is math so hard for some children? The nature and origins of mathematical learning difficulties and disabilities* (pp.7–29). Baltimore, MD: Brooks Publishing Company.
- Gipps, C. (1994). *Beyond Testing: Towards a theory of educational assessment*, London: Falmer Press.
- Given, B. K., & Reid, G. (1999). *Learning Styles: a guide for teachers and parents*. St Anne's-on-Sea: Red Rose Publications.
- Goleman, D. (1995a). *Emotional intelligence*. New York: Bantam Books.
- Goleman, D. (1998). *Working with emotional intelligence*. New York, NY: Bantam Books.



Goleman, D. (2000). Emotional intelligence: Issues in paradigm building. In D. Goleman, & C. Cherniss (eds.), *The Emotionally Intelligent Workplace: How to Select for, Measure, and Improve Emotional Intelligence in Individuals, Groups, and Organizations*. San Francisco, CA: Jossey-Bass.

Goleman, D. (2003) Apples and Applesauce. *Issues and Recent Developments in Emotional Intelligence*, 1(3), 425-448. Retrieved from <http://www.eiconsortium.org>.

Greenberg, M. T., Weissberg, R. P., O'Brien, M. U., Zins, J. E., Fredericks, L., Resnik, H., et al. (2003). Enhancing Social and Emotional Learning school-based prevention and youth development through coordinated social, emotional, and academic learning. *American Psychologist*, 58, 466–474.

Gregg, N. (2007). Underserved and underprepared: Postsecondary learning disabilities. *Learning Disabilities Research and Practice*, 22, 219–228.

Grills-Taquechel, A.E., Fletcher, J.M., Vaughn, S.R., & Stuebing, K.K. (2012). Anxiety and reading difficulties in early elementary school: Evidence for unidirectional-or bidirectional relations? *Child Psychiatry & Human Development*, 43, 35–47.

Guba, E. G., & Lincoln, Y. S. (1981). *Effective evaluation*. San Francisco, CA: Jossey-Bass Publishers.

Hamre, B.K., & Pianta, R.C. (2006). Student–teacher relationships. In G. G. Bear & K. M. Minke (Eds.), *Children's needs III: Development, prevention, and intervention* (pp. 59–71). Bethesda, MD: National Association of School Psychologists.

Handbook of Promotion Program of Psychological Health and Education (2008). National and Kapodistrian University of Athens. University Press, Athens.

Hanich, L.B., Jordan, N.C., Kaplan, D., & Dick, J. (2001). Performance across different areas of mathematical cognition in children with learning difficulties. *Journal of Educational Psychology*, 93, 615–626.

Hargreaves, D. (1995). School culture, school effectiveness and school improvement. *School Effectiveness and School Improvement*, 6(1), 23–46.

Hatch, J.A. (2002). *Doing qualitative research in education settings*. Albany: State University of New York.

Hawkins, J.D., Farrington, D.P., & Catalano, R.F. (1998). Reducing violence through the schools. In D. S. Elliott, B. A. Hamburg, & K. R. Williams (Eds.), *Violence in American schools* (pp. 188–216). Cambridge, UK: Cambridge University Press.

Heiervang, E., Stevenson, J., & Hugdahl, K. (2002). Auditory processing in children with dyslexia. *Journal of Child Psychology and Psychiatry*, 43, 931–938.

Heiman, T., & Kariv, D. (2004b). Manifestations of learning disabilities in university students: Implications for coping and adjustment. *Education*, 125(2), 313-324.

Hein, S. (2005). Professor Hein's website. Retrieved 25 July, 2015, from <http://eqi.org/history.htm>.

Hein, S. (2007). Definition of Emotional Intelligence. Retrieved from [www.eqi.org/eidefs.htm](http://www.eqi.org/eidefs.htm). New York, NY: Psychology Press.

Hennessey, M.G. (1999). *Probing the dimensions of metacognition: Implications for conceptual change teaching-learning*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Boston, MA.

Helm, C. (2007). Teacher dispositions affecting self-esteem and student performance. *Journal of Educational Strategies, Issues and Ideas*, 80(3), 109–10.

Hewitt, J.P. (2009). The social construction of self-esteem. In S. Lopez & C. R. Snyder (Eds.), *Oxford Handbook of Positive Psychology* (pp. 217-225). Oxford, NY: Oxford University Press.

- Hoffman, M.L. (2000). *Empathy and moral development: Implications for caring and justice*. Cambridge, UK: Cambridge University Press.
- Hogan, M.J., Parker, J.D.A., Wiener, J., Watters, C., Wood, L.M., & Oke, A. (2010). Academic success in adolescence: Relationships among verbal IQ, social support, and emotional intelligence. *Australian Journal of Psychology*, 62(1), 30–41.
- Jaeger, A.J. (2003). Jobs competencies and the curriculum: An inquiry into emotional graduate professional education. *Research in Higher Education*, 44, 615-39.
- Jesson, J. (2012). *Developing Creativity in the Primary School*. Berkshire: Open University Press.
- Jiwen Song, L., Huang, G., Peng, K. Z., Law, K. S., Wong, C., & Chen, Z., (2010). The differential effects of general mental ability and emotional intelligence on academic performance and social interactions. *Intelligence*, 38, 137-143.
- Jordan, N.C., Hanich, L.B., & Kaplan, D. (2003). Arithmetic fact mastery in young children: A longitudinal investigation. *Journal of Experimental Child Psychology*, 85(2), 103–119.
- Kavale, K.A., Mathur, S.R., Forness, S.R., Rutherford, R.B., & Quinn, M.M. (1997). Effectiveness of social skills training for students with behavior disorders: A meta-analysis. In T. E. Scruggs & M. A. Mastropieri (Eds.), *Advances in learning and behavioral disabilities* (pp. 1-16). Greenwich, CT: JAI Press.
- Klassen, R.M. (2008). Using predictions to learn about the self efficacy of early adolescents with and without learning disabilities. *Contemporary Educational Psychology*, 32, 173–187.
- Kooij, S. J.J., Bejerot, S., Blackwell A., Caci H., Casas-Brugue, M., Carpentier, P.J., Edvinsson, D., ... Asherson, P. (2010). European consensus statement on diagnosis

- and treatment of adult ADHD: The European Network Adult ADHD. *BMC Psychiatry*, 10, 67.
- Laborde, S., Dosseville, F., & Scelles, N., (2010). Trait emotional intelligence and preference for intuition and deliberation: Respective influence on academic performance. *Personality and Individual Differences*, 49, 784-788.
- Lam, L.T. (2001). Emotional intelligence: Emotional intelligence: The role of transformative learning in academic excellence., *TEXAS STUDY of Secondary Education* ,2, 7-10.
- Landerl, K., Bevan, A., & Butterworth, B. (2004). Developmental dyscalculia and basic numerical capacities: A study of 8–9-year old students. *Cognition*, 92 ,99–125.
- Lange, K.W., Reichl, S., Lange, K.M., Tucha, L., & Tucha, O. (2010). The history of attention deficit hyperactivity disorder. *Attention Deficit and Hyperactivity Disorders*, 4, 241–55.
- Lazarus, R.S., & Folkman, S. (2006). Transactional theory and research on emotions and coping. *European Journal of Personality*, 1(3), 141-169.
- Lee, A. (1989). A Scientific Methodology for MIS Case Studies. *MIS Quarterly*, 13(1), 33-50.
- Lewis, A. (1992). Group child interviews as a research tool. *British Educational Research Journal*, 18(4), 413-421.
- Lindamood, P. (1994). Issues in researching the link between phonological awareness, learning disabilities, and spelling. In G. R. Lyon (Ed.), *Frames of reference for the assessment of learning disabilities: New views on measurement issues* (pp. 351-373). Baltimore: Paul H. Brookes Publishing.

- Lyon, G.R. (1994). *Frames of reference for the assessment of learning disabilities: New views on measurement issues*. Baltimore: Paul H. Brookes Publishing.
- Lyon, G.R. (1995). Research initiatives and discoveries in learning disabilities. *Journal of Child Neurology*, 10, 120–26.
- Lyon, G.R. (1995). Toward a definition of dyslexia. *Annals of Dyslexia*, 45, 3-27.
- Lyon, G.R., Fletcher, J.M., & Barnes, M.C. (2003). Learning disabilities. In E.J. Mash & R.A. Barkley (Eds.), *Child psychopathology* (pp. 520-586). New York, NY: Guilford Press.
- Lyon, R.G., Shaywitz, S.E., & Shaywitz, B.A. (2003). Defining Dyslexia, Comorbidity, Teachers Knowledge of Language and Reading. *Annals of Dyslexia*, 53, 1-14.
- Lyons, A. (2012). Self-esteem and learning disabilities. Retrieved 15 January, 2016, from <http://www.ldail.org/esteem.cfm>.
- MacGilchrist, B., Myers, K. and Reed, J. (2004) *The Intelligent School* (2nd ed). London: Paul Chapman.
- Malekar, S., & Mohanty, R.P. (2011). Constructing an emotional intelligence radar for Indian school students. *Educational Research*, 2(1), 790-802.
- Marquez, P.G., Martin, R.P., & Bracket, M.A. (2006). Relating emotional intelligence to social competence and academic achievement in high school students. *Psichotema*, 18, 18- 23.
- Marsh, H.W., Byrne, B.M., & Yeung, S.Y. (1999). Causal ordering of academic self-concept and achievement: Reanalysis of a pioneering study and revised recommendations. *Educational Psychologist*, 34(3), 155-167.

Marsh, H.W., Trautwein, U., Ludtke, O., Koller, O., & Baumert, J. (2005). Academic self-concept, interest, grades and standardized test scores: Reciprocal effects models of causal ordering. *Child Development*, 76(2), 397-416.

Mayer, J.D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey & D. J. Sluyter (Eds.), *Emotional development and emotional intelligence: Educational implications* (pp. 3-34). New York: Harper Collins.

Mayer, J. D., & Cobb, C. D. (2000). Educational policy on emotional intelligence: Does it make sense? *Educational Psychology Review*, 12, 163–183

Mayer, J.D., Salovey, P., & Caruso, D. (2002a). *Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT)*. Toronto, Canada: Multi-Health Systems.

Mayer, J. D., Salovey, P., & Caruso, D. R. (2002b). *Mayer– Salovey–Caruso Emotional Intelligence Test (MSCEIT) user’s manual*. Toronto, Canada: Multi-Health Systems.

Mayer, J.D., Salovey, P., & Caruso, D.R. (2004a). Emotional intelligence: theory, findings and implications. *Psychological Inquiry*, 60, 197-215.

Mayer, J.D., Salovey, P., & Caruso, D.R. (2004b). A further consideration of issues of emotional intelligence. *Psychological Inquiry*, 60, 249-255.

Mayer, J. D., Salovey, P., Caruso, D., & Sitarenios, G. (2003). Measuring emotional intelligence with the MSCEIT V2.0. *Emotion*, 3, 97–105

Mayer, J.D., & Salovey, P. (2004). Social Intelligence (emotional intelligence, personal intelligence). In C. Peterson & M. Seligman (Eds.), *Character strengths and virtues* (pp. 337-353). Washington, DC: American Psychological Association.

Mayer, J.D., Salovey, P., & Caruso, D.R. (2004a). Emotional intelligence: theory, findings and implications. *Psychological Inquiry*, 60, 197-215.

Mayer, J.D., Salovey, P., & Caruso, D.R. (2004b). A further consideration of issues of emotional intelligence. *Psychological Inquiry*, 60, 249-255.

Mayer, J.D., Salovey, P., & Caruso, D.R. (2008). Emotional intelligence: New ability or eclectic mix of traits?. *American Psychologist*, 63, 503-517.

McCann, C., Fogarty, G. J., Zeidner, M., & Roberts, D.R. (2011). Coping mediates the relationship between emotional intelligence (EI) and academic achievement. *Contemporary Educational Psychology*, 36, 60-70.

Merriam, S.B. (1998). *Qualitative research and case study applications in education*. San Francisco, CA: Jossey-Bass.

Mertens, D.M. (2005). *Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods* (2nd ed.). Thousand Oaks, CA: SAGE Publications.

Miles, M.B., & Huberman, A.M. (1994). *Qualitative data analysis* (2nd ed.). London: Sage.

Moats, L.C., & Lyon, G.R. (1993). Learning disabilities in the United States: Advocacy, science, and the future of the field. *Journal of Learning Disabilities*, 26(5), 282–94.

Moats, L. (1994). Issues in researching the link between phonological awareness, learning disabilities, and spelling. In G. R. Lyon (Ed.). *Frames of reference for the assessment of learning disabilities: New views on measurement issues* (pp. 333-349). Baltimore: Paul H. Brookes Publishing.

Moeller, J., Streblow, L., & Pohlmann, B. (2009). Achievement and self-concept of students with learning disabilities. *Social Psychology of Education*, 12(1), 113-122.

- Mohammadi, S., & Gharayee, B. (2007). Relationship between behavioral disorders and EQ in students. *Journal of Kerman medical sciences university*, 4(4), 40-46.
- Myers, D., & Diener, E. (1995). Who is happy? *Psychological Science*, 6, 10-19.
- NakhostRavana M., Momtazb V., ShahniYeylaghc V., & Maktabid G. (2014). The effect of emotional intelligence training on behavioral disorders, emotional intelligence and academic performance of female primary-school students with behavioral disorders in Ahvaz. *Reef Resources Assessment and Management Technical Paper*, 40(1), 832-43.
- National Institute of Mental Health website (NIMH). (2008). *Diagnosis and treatment of Attention Deficit Hyperactivity Disorder (ADHD)*. Retrieved October 22, 2015, from <http://www.nimh.nih.gov>.
- Narimani, M., Sadeghieh Ahari, S., Homeily N. and Siahpoosh, H. (2009). A Comparison of Emotional Intelligence and Behavior Problems in Dyslexic and Non-Dyslexic Boys. *Journal of Applied Sciences*, 9, 1388-1392.
- NCLD Editorial Staff. (2010). What is Dysgraphia?. National Center for Learning Disabilities. Retrieved from <http://www.nclld.org/ld-basics/ld-aamp-language/writing/dysgraphia>
- Nelson, D., & Low, G. (2003). *Exploring and developing emotional intelligence skills with students*. Symposium on Student Success. Dallas: Prentice-Hall.
- Newsome, S., Day, A.L., & Catano, V.M. (2000). Assessing the predictive validity of emotional intelligence. *Personality and Individual Differences*, 29, 1005–1016.
- Nicolson, R., Fawcett, A.J., & Dean, P. (2001). Dyslexia, Development and the Cerebellum. *Trends in Neurosciences*, 24, 515-516.
- NINDS Dysgraphia Information Page. (2011, September 16). Retrieved from [www.ninds.nih.gov/disorders/dysgraphia.htm](http://www.ninds.nih.gov/disorders/dysgraphia.htm).



Noble, Julie P., Roberts, William L. and Sawyer Richard L. (2006). *Student Achievement, Behavior, Perceptions, and Other Factors Affecting ACT Scores*. ACT Research Report Series 2006 - 1.

Vivo [Computer software]. (2015). Retrieved from <http://www.qsrinternational.com/product>.

O'Connor, R.M., & Little, I.S. (2003). Revisiting the predictive validity of emotional intelligence: Self-report versus ability-based measures. *Personality and Individual Differences*, 35, 1893–1902.

Official Definition of Learning Disabilities. (2015, March 2). Retrieved from <http://www.ldac-acta.ca>.

Ohio University (2003). *Youth Deployment Activity Guide*. Retrieved from [http://www.ong.ohio.gov/frg/frgresources/emotional\\_intellegence\\_8-10.pdf](http://www.ong.ohio.gov/frg/frgresources/emotional_intellegence_8-10.pdf).

Osher, D., Sprague, J., Weissberg, R.P., Axelrod, J., Keenan, S., & Kendziora, K., & Zins, J.E. (2008). A comprehensive approach to promoting social, emotional, and academic growth in contemporary schools. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology* (pp. 1263–1278). Bethesda, MD: National Association of School Psychologists.

Osterman, K.F. (2000). Students' need for belonging in the school community. *Review of Educational Research*, 70, 323–367.

Pajares, F. (2005). Gender differences in mathematics self-efficacy beliefs. In A. Gallagher & J. Kaufman (Eds.), *Gender differences in mathematics: An integrative psychological approach*. (pp. 294-315). New York: Cambridge University Press.

Pammer, K., & Vidyasagar, T.R. (2005). Integration of the visual and auditory networks in dyslexia: A theoretical perspective. *Journal of Research in Reading*, 28, 320–331.

Parker, J.D.A., Creque, R.E., Barnhart, D.L., Harris, J.I., Majeski, S.A., Wood, L.M., Bond, B.J., & Hogan, M.J. (2004). Academic achievement in high school: Does emotional intelligence matter? *Personality and Individual Differences*, 37, 1321-1330.

Parker, J.D.A., Summerfeldt, L.J., Hogan, M.J., & Majeski, S.A. (2004). Emotional intelligence and academic success: examining the transition from high school to university. *Personality and Individual Differences*, 36, 163-172.

Parker, J. D. A., Saklofske, D. H., Wood, L. M., & Collin, T. (2009). The role of emotional intelligence in education. In C. Stough, D. H. Saklofske & J. D. A. Parker (Eds.), *Assessing emotional intelligence: Theory, research, and applications* (pp. 239–255). New York, NY: Springer.

Patten, M.L. (1998). *Questionnaire research: A practical guide*. Los Angeles, CA: Pyrczak Publishing.

Patton, M.Q. (1990). *Qualitative evaluation and research methods*. Newbury Park, CA: SAGE Publications.

Pence, S., Roscoe, E., Bourret, J., & Ahearn, W. (2009). Relative contributions of three descriptive methods: Implications for behavioral assessment. *Journal of Applied Behavioral Analysis*, 42(2), 425-46.

Petrides, K.V., & Furnham, A. (2003). Trait emotional intelligence: Behavioural validation in two studies of emotion recognition and reactivity to mood induction. *European Journal of Personality*, 17, 39-57.

Petrides, K.V., Frederickson, N., & Furnham, A. (2004). The role of trait emotional intelligence in academic performance and deviant behaviour at school. *Personality and Individual Differences*, 36, 277–293.

- Petrides, K.V., Sangareau, Y., Furnham, A., & Frederickson, N. (2006). Trait emotional intelligence and children's peer relations at school. *Social Development, 15*(3), 537-47.
- Pratt, C., & Dubie, M. (2008). Observing behavior using a-b-c data. *The Reporter, 14*(1), 1-4.
- Price, G.R., & Ansari, D. (2013). Dyscalculia: Characteristics, Causes, and Treatments. *Numeracy, 6*(1), Article 2.
- Pupil Performance [Def.2].(2013). In the *Merriam Webster Dictionary*, Retrieved June 15, 2015, from <http://www.merriam-webster.com/dictionary/performance>.
- Rafaila, E. (2015). Primary School Children's Emotional Intelligence. *Journal of Social and Behavioural Sciences, 203*, 173-167.
- Ramus, F., Rosen, S., Dakin, S. C., Day, B. L., Castellote, J. M., White, S., & Frith, U. (2003). Theories of developmental dyslexia: Insights from a multiple case study of dyslexic adults. *Brain, 126*, 841-865.
- Räsänen, P., Salminen, J., Wilson, A. J., Aunio, P., & Dehaene, S. (2009). Computer assisted intervention for children with low numeracy skills. *Cognitive Development, 24*, 450-472.
- Reaser, A., Prevatt, F., Petscher, Y., & Proctor, B. (2007). The learning and study strategies of college students with ADHD. *Psychology in the Schools, 44*, 627–638.
- Reid, R., Riccio, C. A., Kessler, R. H., DuPaul, G. J., Power, T. J., Anastopoulos, A. D., et. al. (2000). Gender and ethnic differences in ADHD as assessed by behavior ratings. *Journal of Emotional and Behavioral Disorders, 8*(1),38-48.
- Reiff, H.B., Hatzes, N.M., Bramel, M., & Gibbon, R. (2001). The relation of LD and gender with emotional intelligence in college students. *Journal of Learning Disabilities, 34*, 66-78.

Rieber, R.W (Ed). (1997a). *The collected works of L. S. Vygotsky: Vol. 4. The history of the development of higher mental functions* (M. Hall, Trans., Original work written 1931). New York: Plenum Press.

Roberts, Kerry L. & Sampson, Paulinen M.(2011). School board member professional development and effect on student achievement. *International Journal of Educational Management*, 25(7), 701-713.

Ryan, R.M., & Deci, E.L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychological Association*, 55(1),68–78.

Saarni C., Mumme, D., Campos, J.J. (1998). Emotional development: Action, communication, and understanding. In N. Eisenberg (Eds.), *Social, emotional and personality development* (pp. 237-309). New York: Wiley.

Salkind, N.J. (1991). *Exploring research*. New York, NY: Macmillan Publishing Company.

Salovey, P., & Mayer, J.D. (1990). Emotional intelligence. *Imagination, Cognition, and Personality*, 9, 189.

Schraw, G. (1998). Promoting general metacognitive awareness". *Instructional Science*, 26, 113–12.

Schunk D.H., & Pajares F., (2002). The development of academic self-efficacy. In A. Wigfield & J. Eccles (Eds.), *Development of achievement motivation* (pp. 16–32). San Diego, CA: Academic Press.

Semrud-Clikeman, M., & Hynd, G.W. (1991). Specific nonverbal and social-skills deficits in children with LD. In J. B. Obrzut & G. W. Hynd (Eds.), *Neuropsychological foundations of LD* (pp. 604- 629). San Diego: Academic Press.

Shankweiler, D., Crain, S., Katz, L., Fowler, A.E., Liberman, A.M., Brady, S.A., Thornton, R., Lundquist, E., Dreyer, L., Fletcher, J.M., ...Shaywitz, B.A. (1995). Cognitive profiles of reading-disabled children: Comparison of language skills in phonology, morphology, and syntax. *Psychological Science*, 6, 149-156.

Shaywitz, B.A., Fletcher, J.M., & Shaywitz, S.E. (1994). A conceptual framework for learning disabilities and attention-deficit hyperactivity disorder. *Canadian Journal of Special Education*, 9(3), 1-32.

Shaywitz, S.E., Fletcher, J.M., Holahan, J.M., Schneider, A.E., Marchione, K.E., Stuebing, K.K. (1999). Persistence of dyslexia: The Connecticut Longitudinal Study at adolescence. *Pediatrics*, 104, 1351–1359.

Shipley, N.L., Jackson, M.J., & Segrest, S.L. (2010). The Effects of Emotional Intelligence, Age, Work Experience, and Academic Performance. *Research in Higher Education Journal* (9), 1-18.

Siegler, R.S., & Shipley, C. (1995). Variation, selection, and cognitive change. In T. Simon & G. Halford (Eds.), *Developing cognitive competence: New approaches to process modeling* (pp.31-76). Hillsdale, NJ: Erlbaum.

Silliman, E., & Berninger, V. (2011). Cross-disciplinary dialogue about the nature of oral and written language problems in the context of developmental, academic, and phenotypic profiles. *Topics in Language Disorders*, 31, 6-23

Slavin, R.E. & Madden, N.A. (2001). Reducing the gap: Success for All and the achievement of African-American and Latino students. Washington, DC: Office of Educational Research and Improvement.

Sparks, R.L., & Lovett, B.J. (2009a). College students with learning disability diagnoses: Who are they and how do they perform? *Journal of Learning Disabilities*, 42, 494-51.

- Stake, R.E. (1994). Case Studies. In N. K. Denzin & Y. S. Lincoln (Eds.) *Handbook of Qualitative Research* (pp. 236-247). Thousand Oaks: Sage Publications.
- Stake, R.E. (2000). Case studies. In Norman K. Denzin & Yvonna S. Lincoln (Eds.), *Handbook of qualitative research* (pp.435-453). Thousand Oaks: SAGE Publications.
- Stake, R.E. (2005). Qualitative case studies. In N. K. Denzin, & Y.S. Lincoln . *The Sage handbook of qualitative research* (pp. 443-466). Thousand Oaks, CA: SAGE Publications.
- Stake, R.E. (2008). Qualitative case studies. In N. K. Denzin, & Lincoln, Y. S. (Eds.), *Strategies of qualitative inquiry* (pp. 119-149). Los Angeles: Sage.
- Stein, J.F. (2001). The magnocellular theory of developmental dyslexia. *Dyslexia*, 7(1), 12-36.
- Steinhausen, H.C., Drechsler, R., Foldenyi, M., Imhof, K., & Brandeis, D. (2003). Clinical course of attention deficit/hyperactivity disorder from childhood toward early adolescence. *Journal of the American Academy of Child and Adolescent Psychiatry*, 42(9), 1085-1092.
- Stress (Biology). (2008). Retrieved October 15, 2008, from Wikipedia: [https://en.wikipedia.org/wiki/Stress\\_biology](https://en.wikipedia.org/wiki/Stress_biology).
- Stys, Y., & Brown, S.L. (2004). *A review of the emotional intelligence literature and implications for corrections*. Research Branch. Correctional Service of Canada
- Sroubek, A., Kelly, M., & Li, X. (2013). Inattentiveness in attention deficit/hyperactivity disorder. *Neuroscience Bulletin*, 1,103–10.
- Sutarso, T., Baggett, L.K., Sutarso, P., & Tapia, M. (1996). *Effect of gender and G.P.A on emotional intelligence*. Paper presented at the annual meeting of the Mid-south

educational research association, November, Tus-calooosa, Alabama. Retrieved March,1, 2016 from <http://search ERIC.org/ericdb/ED 406410. htm>

Swanson, S., & Howell, C. (1996). Test anxiety in adolescents with learning disabilities and behavior disorders. *Exceptional Children*, 62(5), 389 - 389.

Swart, A. (1996). *The relationship between well-being and academic performance*. Unpublished master's thesis, University of Pretoria, South Africa.

Taghavi, M.R., Neshat-Dost H. T., Moradi A. R., Yule W., & Dalglish T. (1999). Biases in visual attention in children and adolescents with clinical anxiety and mixed anxiety-depression. *Journal of Abnormal Child Psychology*, 27, 223-223.

Tillery, A.D., Varjas, K., Meyers, J., & Collins, A.S. (2010). General Education Teachers' Perceptions of Behavior Management and Intervention Strategies. *Journal of Positive Behavior Interventions*, 12(2), 86-102.

Tiwari, P.S.N., & Srivastava, N. (2004). Schooling and Development of Emotional Intelligence. *Psychological Studies*, 49 , 151-4.

Torgesen, J.K. (2000) Individual differences in response to early interventions in reading: The lingering problem of treatment resisters. *Learning Disabilities Research & Practice*, 15, 55–64.

Tucha, L., Simpson, W., Evans, L., Birrel, L., Sontag, T.A., Lange, K.W., & Tucha, O. (2010). Detrimental effects of gum chewing on vigilance in children with attention deficit hyperactivity disorder. *Appetite*, 55, 679–684

Turner, J.C., & Patrick, H. (2004). Motivational influences on student participation in classroom learning activities. *Teachers College Record*, 106(9), 1759-1785.

U.S. Office of Education (USOE) (1977). Definition and criteria for defining students as learning disabled. Washington, DC: U.S. Government Printing Office.

Valentine, J.C., Dubois, D.L., & Cooper, H. (2004). The relation between self-beliefs and academic achievement: A meta-analytic review. *Educational Psychologist*, 39, 111-133.

Van der Zee, K., Thijs, M., & Schakel, L. (2002). The relationship of emotional intelligence with academic intelligence and the Big Five. *European Journal of Personality*, 16, 103-125.

Vellutino, F.R., Fletcher, J.M., Snowling, M.J., & Scanlon, D.M. (2004). Specific Reading Disability (Dyslexia): What have we Learned in the Past Four Decades? *Journal of Child Psychology and Psychiatry*, 45, 2-40.

Walitza, S., Drechsler, R., & Ball, J. (2012). The school child with ADHD. *Ther Umsch*, 69(8), 467–473.

Wang, M. C., Haertel, G. D., & Walberg, H. J. (1997). Learning influences. In H. J. Walberg & G. D. Haertel (Eds.), *Psychology and educational practice* (pp. 199-211). Berkeley, CA: McCatchan Publishing Corporation.

Ward, A., Stoker, H., & Murray-Ward, M. (1996). Achievement and Ability Tests - Definition of the Domain. *Educational Measurement*, 2, 2-5.

Wearmouth, J., Berryman, M., & Glynn, T. (2009). *Inclusion through participation in communities of practice in schools*. Wellington: Dunmore Publishing Ltd.

Weissberg, R.P., Kumpfer, K., Seligman, M.E.P. (2003). Prevention that works for children and youth: An introduction. *American Psychologist*, 58, 425-432.

Wilson, N., & McLean, S. (1994). *Questionnaire Design: a Practical Introduction*. Newtown Abbey: University of Ulster Press.



Wilson, A.J., Dehaene, S., Pinel, P., Revkin, S.K., Cohen, L., & Cohen, D. (2006). Principles underlying the design of “The Number Race”, an adaptive computer game for remediation of dyscalculia. *Behavioral and Brain Functions*, 2 (19).

Wigfield, A., Guthrie, J.T., Tonks, S., & Perencevich, K.C. (2004). Children's motivation for reading: Domain specificity and instructional influences. *Journal of Educational Research*, 97, 299-309.

Witzel, B.S., & Mercer, C.D. (2003). Using rewards to teach students with disabilities. *Remedial and Special Education*, 24(2), 88-96.

Woitaszewski, S.A., & Aalsma, M.C. (2004). The contribution of emotional intelligence to the social and academic success of gifted adolescents as measured by the Multifactor Emotional Intelligence Scale – Adolescent version. *Roeper Review*, 27, 25-30.

Wojinalower, D.A., & Gross, A.M. (1998). Knowledge, perception and performance of assertive behavior in children with learning disabilities. *Journal Learning Disabilities*, 21, 109-117.

Wong, C., Wong, P., & Chau, S. (2001). Emotional intelligence, students' attitude towards life and the attainment of education goals: an exploratory study in Hong Kong. *New Horizons in education-the Journal of education, Hong Kong teachers Association, HKTA*, 44, 1-11.

World Health Organisation. (1992). *The ICD-10 classification of mental and behavioural disorders: clinical descriptions and diagnostic guidelines*. Geneva: World Health Organisation.

Yin, R.K. (1981). The case study crisis: Some answers. *Administrative Science Quarterly*, 26(1), 58-65.

Yin, R.K. (1994). *Case study research: Design and methods* (2nd ed.). Thousand Oaks, CA: SAGE Publications.

Yin, R.K. (1999). Enhancing the quality of case studies in health services research. *Health Services Research*, 34(5), 1209-1224.

Yin, R.K. (2003a). *Applications of case study research* (2nd ed.). Thousand Oaks, CA: SAGE Publications.

Yin, R.K. (2003b). *Case study research: Design and methods* (3rd ed.). Thousand Oaks, CA: SAGE Publications.

Yin, R.K. (2005). Introduction. In R.K. Yin (Ed.), *Introducing the world of education: A case study reader* (pp. xiii-xxii). Thousand Oaks, CA: SAGE Publications.

Zeidner, M., Roberts, R.D., & Matthews, G. (2002). Can emotional intelligence be schooled? A critical review. *Educational Psychologist*, 37, 215-231.

Zins, J.E., Weissberg, R.P., Wang, M.C., & Walberg, H.J. (Eds.).(2004). *Building school success through social and emotional learning*. New York: Teachers College Press.

# APPENDICES

## APPENDIX 1- RESEARCH TOOLS

### 1.1 Observation Protocol

**Table of emotional management-Observation Protocol**

<b><u>Class:</u></b>
<b><u>Researcher:</u></b>
<b><u>Date:</u></b>
<b><u>Hour:</u></b>
<b><u>Subject – Activity:</u></b>

Pupils	Pupil 1	Pupil 2	Pupil 3	Pupil 4
--------	---------	---------	---------	---------

Does the pupil recognize feelings in oneself and others?				
Does the pupil cooperate with his classmates during collaborating teaching activity?				
Does the pupil tend to react inappropriately to situations and impulses?				
Does the pupil participate spontaneously during the lesson (intrinsic motivation)?				
Does the pupil seem to recognize his capacities and his knowledge?				
Does the pupil feel insecure about oneself and capacities?				
Is the pupil over confident about oneself and abilities?				
Does the pupil indicate to be open to success?				

Is the pupil happy about the success?				
Does the pupil bale out trying in case that he/she does not make it?				
Does the pupil indicate to be open to failure?				
Does the pupil tend to promote a positive self-image?				
Does the pupil react to verbal reprimand?				
Does the pupil be able to control his/ her anger?				
Does the pupil fail in expressing his anger, either physically or verbally, even if the impulse would normally cause that feeling?				
Does the pupil feel extremely scared?				
Does the pupil have constant fears?				
Does the pupil seem to be passive, weak or upset?				
Does the pupil have frequent or even extreme mood changes?				
Does the pupil have unprovoked breakouts of crying, laughing or anger that he/ she is unable to control?				
Does the pupil often yell?				
Does the pupil tend to be emotional distracted when it happens the teaching to be disrupted?				
Does the pupil seem to be able to control oneself?				



- What is most stressful for you at school? (perception of negative feelings)
- How would you describe yourself? If you want you can start with the phrase “I am.... and....” (recognition of personality’s merits and demerits).

### 1.3 Questionnaire

Date:.....

Class:.....

Gender: M F

# THE GRANDMOTHER'S CARPET

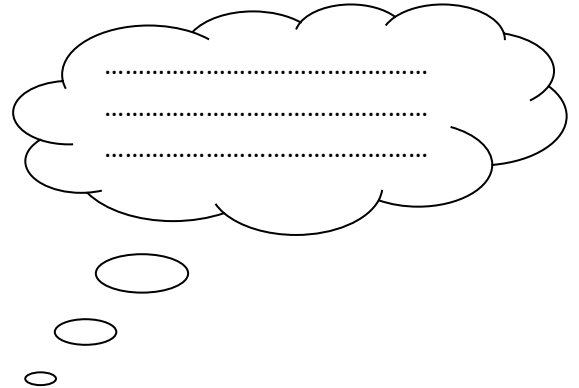
- Could you fill out the boxes of the carpet with different emoticons that show the emotions you have experienced?



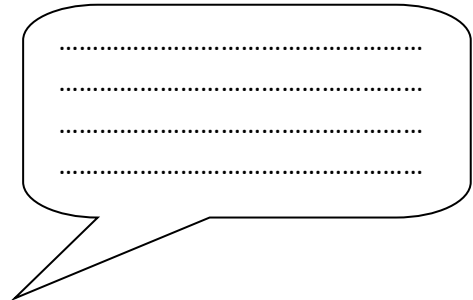
# SOMETHING IS GOING WRONG

- In the following pictures something seems to go wrong.

Could you find out what the problem is and write down what exactly each hero would like to say?



I am really happy that Mary won in the running and she won the medal!



-Do you feel sad due to your score in Language?

-No I am pretty fine, can't you see?





-I don't think that you mind your cousin taking your magazine without your permission , right?

-No, no aunt. For sure not.

- Has it ever happened to you to hide your real feelings while speaking?

Could you give an example?

.....

.....

.....

.....

.....

.....

.....

.....

# A FEELING...DIFFERENT SITUATIONS

- Could you fill out the boxes with your experiences?

I regretted when I

I was very sad when

I laughed a lot when

I was very happy when

I was surprised when I

I got scared when I

I got very shy when I

I cried a lot when

I got very enthusiastic when

# MERITS AND DEMERITS

My strong points	My weaknesses

- ◆ Was it more difficult to find out your strong or your weak points?

.....

.....

.....

- ◆ According to your opinion why did this occur?

.....

.....

.....

- ◆ Put in a circle three persons that you would like to say something positive about you:

teacher, grandmother, mother, neighbor, brother/sister, uncle, father, friend



# IF I WERE...



The aforementioned graphic is translated as follows:

If I were a colour I would be...

If I were a song I would be...

If I were a lesson I would be...

If I were a job I would be...

If I were an animal I would be...

If I were a candy I would be...

♦ Looking at your classmate, try to find out what would he/she be if :

He/ She was a toy.....

He/ She was a movie hero.....

He/ She was a food.....

## APPENDIX 2- INTERVIEWS

### 2.1 Interview Eleanna- Anastasia

- **At which course do you think you perform better?**

E: At Art.

A: At Mathematics.

- **Do you feel happier in case of Language or Mathematics course?**

E: I would choose Language.

A: Eh...at Mathematics.

- **Who is your best friend in class? How do you feel if he/she feels happy and how if he/she feels sad?**

E: Anastasia.

A: Eleanna, Angelina and Sotiria.

E: I will feel really bad too. I will help her and I will make her jokes. If she is happy with something, I will be happy too and I will be excited.

A: Heh.. Normal. If something extraordinary happens like taking an A in a test I would say "Well done!".

E: When I quarrel with Anastasia I try to overcome it and be again her close friend.

A: Angelina and Sotiria have ruined their friendship and I helped them to reconcile.

- **Do you think the teacher has ever been unfair to you?**

E: Yes it happened once at a test, but nor have I showed it to him nor have I told him so.

A: I deserve all the marks that I have got and everything he said about me.

- **Do you think that you always do your best at class? Could you remember one time that this did not happen?**

E: Yes, when I am in mood. Many times, at Math it takes me some time before answering. I find them difficult.

A: I am trying...it happened sometimes not to do my best. I remember for example that last time at the lesson of history I haven't read and at the test I wrote the things I had in mind.

E: How to say it...I am a good friend and I am sweet.

A: I am ok...I don't know...What do you mean? I think I am good...I don't know what to answer. Maybe I am a good friend and I help a lot my mother.

- **What do you think you are good at and not as good?**

E: I try to think about it!

A: I am good at... I don't know... What do you mean...? Hmmm... I think I am good at... I don't know what to answer. I think I am good in helping my mother and being a good friend.

- **How do you feel when the teacher asks you a question that you don't know the answer to?**

E: I feel happy (Yes and she raises her hands). I lower my head on my book, the lesson.

A: Eh...I would smile.

Eh...it happens often and I always lower my head.

(Laughs)

- **How do you feel when the teacher recompenses you and how if he/she is disappointed either with your behavior or performance? Could you show me with your body and face?**

A: I think I would be happy. I can't show it, I would just be happy. I can't pretend being happy at the moment. When he is verbal reprimand me I feel disappointed.

E: I say "Hurray!" and I feel extremely happy. On the contrary I feel sad and I am thinking of what I can do to perform better.

- **Do you know the classroom rules? Do you follow them?**

E: I think I do...For example respect our classmate, we raise our hand, we don't whisper at class, we knock the door and we say "Good morning".

A: Yes...I know all of them and I respect except some of them. For example I say sometimes nonsense and irrelative things during the lesson and I am talking with my friend behind me.

- **Do you consider yourself a good, average or bad performing pupil? Could you explain it to me?**

E: I am an average pupil, because at some lessons I am good and at others not so good.

A: I am a low performing pupil because of the bad notes I receive and according to the teacher's assessment. I do not always do my best, but this does not happen on purpose.

- **Do you compare yourself with your classmates?**

E: It has never happened to me... Maybe once I have said that they are a bit better. Let's say that I am petite comparing to my friends. That's all...

A: It happens often to me, I say to myself that they are better than me. The contrary has never happened though, I wish it happened.

- **How would you describe your teacher?**

E: Nice and smart. Cute...I would like to continue next year with him.

A: Smart, nice, handsome, tall, a little bit strict. I would like him to be more cool. Once for example I was talking to my friend Eleanna behind me and he got out of temper. Ok he was right...

- **What is for you the main stress source at school?**

E: Mmmmm... I don't feel stress at all.

A: The main source of my school stress is examination by the teacher because I feel inadequate to answer, even if I have studied at home.

- **How would you describe yourself? If you want you can start with the phrase "I am.... and...."**

E: I am very "small", how to express that... It is as I am not visible at all, not because I am short not because of the fact that I don't talk, on the contrary I talk a lot, I am very gabby.

A: I am Anastasia and I am not that good at many things. I am good at some things and I try to improve myself. I try to be a good friend because I am not always.

## **2.2 Interview George- Petros- Angelos**

- **At which course do you think you perform better?**

G: I am good at French and at English.

A: At history and at sports.

P: I am good at computers.

- **Do you feel happier in case of Language or Mathematics course?**

G: Mathematics for sure.

A: I prefer Mathematics too.

P: Me too.

- **Who is your best friend in class? How do you feel if he/she feels happy and how if he/she feels sad? Do you think the teacher has ever been unfair to you?**

G: My best friend is Thanasis. He has never been sad, but he has been very happy. Then I celebrate with him and I feel really joyful.

A: My best friend is Nasos and if he is happy about something then I will feel what he feels. He never came unhappy at school.

P: My best friend is Gerasimos. If he gets sad about something I don't know how I will feel. If he feels happy, I don't know either.

G: Not me.

A: Not me.

P: He has never been unfair to me.

- **Do you think that you always do your best at class? Could you remember one time that this did not happen?**

G: I always do my best, there are times though that I quit. It happened at English last time but I don't want to speak further about that.

A: I don't do my best only when I am very tired because the day before I was on training. Otherwise I try hard.

P: I always did my best and I can't remember of a time that I really didn't.

- **What do you think you are good at and not as good?**

G: I am very at sports and I am not good at history.

A: I am very good at basketball, at ping-pong and at Mathematics. I am not very good at language.

P: I am very good at basketball and I am not that good at Hockey and French.

- **How do you feel when the teacher asks you a question that you don't know the answer to?**

G: I do my best to remember.

A: I feel nervous too and I try to think of the answer.

P: I feel weird and nervous.

- **How do you feel when the teacher recompenses you and how if he/she is disappointed either with your behavior or performance? Could you show me with your body and face?**

G: I feel nice (he jumps and he smiles). When he makes a comment I lower my head.

A: When he says "Well done!" I feel perfect, I please myself.

P: When he says "Well done!", I celebrate and when he makes a remark to me I feel disappointed.

- **Do you know the classroom rules? Do you follow them?**

G: I know the rules of the class and I respect them.

A: I know the rules of the class and I follow them.

P: I know the rules of the class and I respect them.



- **Do you consider yourself a good, average or bad performing pupil? Could you explain it to me?**

G: I think I am a good pupil because I often answer the questions.

A: I believe that I am good when I am focused and then the others say something good to me.

P: I also believe that I am a good pupil because my classmates have told me so.

- **Do you compare yourself with your classmates?**

G: Yes very much.

A: Yes especially when it concerns lessons.

P: Me too.

G: Not so often. It happens only when I am better than the others.

A: Only sometimes I compare myself to others especially when my classmate get better than me.

P: I don't care about comparing myself to others.

- **How would you describe your teacher?**

A: She is fair, she know when to scold children and when not to. I like our professor.

G: She is exactly like Angelos described her.

P: She is nice when she makes comments in order to perform better.

- **What is for you the main stress source at school?**

G: I get stressed about sports because I feel incapable of learning how to dance.

A: I stress myself about worksheets or tests.

P: I get stressed about sports because if I don't learn how to dance, then I have to miss the break.

- **How would you describe yourself? If you want you can start with the phrase "I am.... and...."**

P: I am Petros and I am a good child and a good pupil.

A: I am Angelos and like sports and playing with my friends.

G: I am George and I don't like school. I like playing computer games all the time.

## 2.3 Interview Yiannis-Annika-Vasilis

- **At which course do you think you perform better?**

Y: At English.

A: At sports.

V: At Mathematics.

- **Do you feel happier in case of Language or Mathematics course?**

Y: Language.

A: Eh...in Language.

V: Mathematics

- **Who is your best friend in class? How do you feel if he/she feels happy and how if he/she feels sad?**

Y: Vassilis and Constantinos. If Vassilis gets sad, I will be sad in my turn. If he is pleased, I will be pleased too. I can't tell you, I don't remember. I think I haven't offered my help to anyone so far.

A: My best friend is Katerina. If she is sad, I will be sad too. If she is pleased, i will be too. My friends never face any problem. On the contrary, I have.

V: I have three. Yiannis, Constantinos and George. If they get sad with something, I will feel sad. They have asked for my help. Constantinos has hit his leg once and I helped him go down the stairs because he was not able to.

- **Do you think the teacher has ever been unfair to you?**

Y: Yes, it has happened once at a test but I haven't told him nor have I showed it to him.

A: Miss Vicky has never been unfair to me.

V: She has never been unfair towards me. And the comments she makes are always fair.

- **Do you think that you always do your best at class? Could you remember one time that this did not happen?**

Y: Sometimes I do, but sometimes I turn back and Mr Apostolis points out on me.

A: I do my best in class, maybe once I didn't.

V: Of course, it has been once that I haven't done my best.

- **What do you think you are good at and not as good?**

Y: In general, I am good at Language, at Mathematics, at Arts and at football. I am not so good at French.

A: I am good at Language, at Sports, at ballet and at basketball. I don't perform well at Mathematics and at French.

V: I perform well at Mathematics and at sports. I am not good either at French.

- **How do you feel when the teacher asks you a question that you don't know the answer to?**

Y: When I don't know the answer I think about it, I focus myself on it and in case I don't find it I tell my professor I can't in order to ask somebody else.

A: I try to find the answer and when sometimes I don't find it I ask my professor to find somebody else.

V: When I don't know the answer I don't feel at ease and I hope somebody else .... Unfortunately, this doesn't happen very often.

- **How do you feel when the teacher recompenses you and how if he/she is disappointed either with your behavior or performance? Could you show me with your body and face?**

Y: When she says bravo to me, I say to myself "Yes" (*He raises his hands up*) and I share it then with my grandparents and in case she makes me remarks I wonder "Why haven't I answered correct"?

A: I am happy when she says bravo and when she makes comments I feel bad and I become shy.

V: I feel really happy, I feel like jumping. On the contrary, I feel bad, I lower my head and I try not to repeat the same thing, that annoyed the teacher or my class mates.

- **Do you know the classroom rules? Do you follow them?**

A: Yes of course.

Y: Me too.

V: Yes.

Y: Some of them yes, some others no. For example, I turn back all the time and the professor gets angry.

A: I don't respect some of them when I talk to my friends behind.

V: I respect some of them. Some others I don't. Sometimes I lay on the desk (laughs) and sometimes I am playing with a map beside me.

- **Do you consider yourself a good, average or bad performing pupil? Could you explain it to me?**

Y: am a high performing pupil, I am good at almost everything!

A: Me too. I am average. I can understand it from the notes I get and sometimes when my professor tells me so

V: I am a good pupil because of my good notes at tests and progress reports.

- **Do you compare yourself with your classmates?**

Y: I compare myself with others only when I have got a higher note than them.

A: I never compare myself with my classmates. It has never happened to me so far.

V: No, I do not compare myself with classmates.

- **How would you describe your teacher?**

Y: In general he is good but sometimes he gets nervous.

A: She is beautiful, we play games together, she is calm and I would like to be together next year.

V: He is nice, tall, handsome and he has a nice character and I really like when he tells us jokes.

- **What is for you the main stress source at school?**

A: I get stressed when we are given the papers and as always I don't know.

V: When she gives us the tests to see my notes.

Y: The same as Vassilis.

- **How would you describe yourself? If you want you can start with the phrase "I am.... and...."**

Y: I am Yiannis and I am tall, not so tall, an average pupil, sometimes I am good at lessons and at extracurricular activities but I talk too much.

A: I am Annika and I don't know what to say about me.

V: My name is Vassilis, I am good at lessons and all the time I tell jokes.

## **2.4 Interview Constantis-Dimitris**

- **At which course do you think you perform better?**

K: I think I perform well at computers, at history, at English and at Arts.

D: I believe that I am good at English and at French, but especially at Mathematics.

- **Do you feel happier in case of Language or Mathematics course?**

K: Language.

D: Mathematics.

- **Who is your best friend in class? How do you feel if he/she feels happy and how if he/she feels sad?**

K: It's Dimitris Mpathrelos.

D: My best friend is Loizos.

K: (pause)...If he gets sad with something I don't know what to do...because he never reveals what he feels. If he is happy with something, let's say a test that he performed well and he begins to boast, I will tell him to stop boasting it's just a test. If he just feels happy about, then I will say to him "bravo! You did very well". I help a lot my friends when they don't know something.

D: When my friends feel unhappy I try to consolate them. If he succeeds in something and he is happy I will say "Bravo, congratulations!". My female friends need really my help. For example they have asked if they did correctly an exercise. Except from that I have helped them getting down the kite from the tree.

- **Do you think the teacher has ever been unfair to you?**

K: Once she has been unfair, yesterday to be exact. Some kids were discussing and Mr Apostolis made a remark to me even though I didn't participate. It was unfair and I told him so.

D: He was unfair to me once that it was my turn to say the lesson at Mathematics and another kid interrupted me and he (the teacher) didn't address me the speech. I haven't showed it to him though.

- **Do you think that you always do your best at class? Could you remember one time that this did not happen?**

K: I always do my best... Except a time that I had a headache and I couldn't think and concentrate at all.

D: I have improved a lot at football, but at basketball and at rugby I am not that good. I have a nice character but when I get angry, I get angry and when I am happy, I am happy.

- **What do you think you are good at and not as good?**

K: I am good at basket but not that good at handball. As far my personality is concerned I am not lying but I can't focus on something for a long period of time and I often get bored. I am also really good at football and sailing.

D: I have improved myself at football but I am not that good at basketball and rugby. Concerning my personality I express my anger and my happiness.

- **How do you feel when the teacher asks you a question that you don't know the answer to?**

K: I try to think about even if my answer is wrong. I better answer wrongly than not answer at all.

D: I try to find a solution because I am very good. At Mathematics I find the answer very quickly and I make calculations with my mind. If I don't know the answer I do my best to find it.

- **How do you feel when the teacher recompenses you and how if he/she is disappointed either with your behavior or performance? Could you show me with your body and face?**

K: I feel great...(he raises his hands). If the teacher scolds me because I haven't read something I go home, I hit my hand to the wall and then I start repeating.

D: I would stay indifferent because the teacher has told not to take everything personally. If he remarks me then I get shy.

K: Yes but we have never read them.

- **Do you know the classroom rules? Do you follow them?**

D: Yes of course.

K: Yes Dimitris and me always respect them.

D: We respect them for sure and furthermore we care about the class being in order.

- **Do you consider yourself a good, average or bad performing pupil? Could you explain it to me?**

K: Not average, not good, something in the middle. The important thing is not to boast myself like others do...

D: I think that this year I have been a good pupil. Not on the topic of notes. Because A level may be 8,9 or 10. You don't know that. From next year I will know better. I can see it by my writings.

K::Of course I can.

D: Oh yes.

- **Do you compare yourself with your classmates?**

K: Yes...not concerning school, but at games and staff like that.

D: Because I am the captain at the football team, I compare them and some of them are good and some others bad... Logical...

- **How would you describe your teacher?**

K: I see him as someone who is trying to learn us some things in order to possess them. He is a good teacher.

D: He has a good character, comfortable and good-hearted. He is very well educated and I want to underline something else... He is on the heat of the moment, when he gets angry he doesn't accept jokes, when he is happy he shows it. And many times he felt sad but he didn't reveal himself. That is a good element.

- **What is for you the main stress source at school?**

K: Reading, reading, reading...and dancing at sports.

D: I stress a lot about diplomas and even more about tests.

- **How would you describe yourself? If you want you can start with the phrase "I am.... and...."**

K: I consider myself as a guy who gets easily angry and I burst into cries. I take things serious really often and what he asks for the thing he wants.

D: I would describe me as a good character, easy going, and when I get angry I scream a lot but when I am happy you can understand, I show it. In general, I am a good person and I don't tell lies often and when I regret I apologise myself. And I don't say insults, I speak nice to all even if they are not my friends.

## 2.5 Interview Stratos- Andy- George K.

- **At which course do you think you perform better?**

S: At computers and at Mathematics.

A: At Mathematics.

G: At computers and at robotics.

- **Do you feel happier in case of Language or Mathematics course?**

S: During Language course, a lesson might be funny and interesting and some other time it might not be, thus I can't compare.

A: Both are nice, but they talk about different things. For example, Language has words, and Mathematics has numbers. But I prefer Language.

G: I prefer Mathematics.

- **Who is your best friend in class? How do you feel if he/she feels happy and how if he/she feels sad?**

A: I have three good friends, Danai, Tina and Eftichia. I will be happy if they are happy and I will be sad if they are sad because they are my friends. It hasn't happened until now.

S: I have a lot of friends inside and outside class. My best friends are Merkourios and Alexandros. If something makes them really happy, then I will also feel really nice! In case that some of my friends will feel sad I would feel sad. One of my friends has asked my help for a construction. I helped him and I have felt really nice!

G: My best friend is Peter. If he feels sad with something I will feel the same too. If he is pleased I will be pleased too. It has happened to me to ask for my help and I helped him to feel better I think.

- **Do you think the teacher has ever been unfair to you?**

S: I was punished once because I was not that calm. At the beginning I felt she was unfair to me but then she was right. And I apologised myself. I want to say that it is not a nice experience to be punished but at least I learned how to be quiet.

A: Never. I think the teacher is always right. Old people are always right.

G: Miss Vicky has never been unfair to me.

- **Do you think that you always do your best at class? Could you remember one time that this did not happen?**

S: I do not always put great effort in everything. If the teacher is next to me I always try to do more. Maybe sometimes it happened that I could not control myself and I have to take my time to relax.

A: It happens at tests not to do my best.

G: I think that I always do, except from the times that I am tired.

- **What do you think you are good at and not as good?**

S: I am good at constructions. I remember last year I have made a very nice diary. I am good at computers. But I have a bad writing character.

A: I am not good at English, Mathematics and French, even though I try to. And I am also not good at controlling myself when I get angry. Ah, and sometimes I do not believe in my abilities. I am a good friend though!

G: I am good at lessons but more at videogames and I am not good at sports.

- **How do you feel when the teacher asks you a question that you don't know the answer to?**

S: I try to find the answer.

A: I feel very unhappy.

G: I try to find the answer.

- **How do you feel when the teacher recompenses you and how if he/she is disappointed either with your behavior or performance? Could you show me with your body and face?**

S: I feel really nice and pleased and I put even more effort. When he is making a comment to me I try to listen to him to be better.

A: I feel extremely happy and I proud of myself. When he makes remarks I don't feel ok. (*She stands up, yell and smiles.*)

G: I feel very nice when he says bravo. When he is remarking me I get sad.

- **Do you know the classroom rules? Do you follow them?**

G: Yes I know them.

A: I know them too.

S: I often respect them. Eh...sometimes I don't respect them. There are two basic rules, not to speak among ourselves and pay attention.

A: I almost respect them.

G: Me too.

- **Do you consider yourself a good, average or bad performing pupil? Could you explain it to me?**

S: I am a good pupil but I can do better.

A: I am a good pupil because I try very hard.

G: I am a good pupil because I try...



- **Do you compare yourself with your classmates?**

S: I look to myself as I look the others. But those who are good.

A: Sometimes I compare myself to my classmates and I feel sad when I don't progress as others do.

G: I never compare myself to my classmates.

- **How would you describe your teacher?**

S: Sometimes we don't cope with what our teacher is asking us. He is a nice person and I can't find something negative to her.

A: I consider our teacher a very nice one and she always does our favours even if we don't do hers. And that gets sad because she is trying hard.

G: She is a good teacher and a good person. I would like to have her next year.

- **What is for you the main stress source at school?**

S: Nothing stresses me I just don't want that something bad happens to my friends.

A: I get stressed when our teacher scolds me and yells at me.

G: Maybe the test, I don't know.

- **How would you describe yourself? If you want you can start with the phrase "I am.... and...."**

S: I am Stratos and I have a good character. Sometimes I have unexpected reactions but I try to be better.

A: I am Andy and I like basketball. And I am good girl except from the moments that I quarrel with my brother.

G: I am George and I have a lot of friends and I am a good boy.

## APPENDIX 3-QUESTIONNAIRES

### 3.1 Stratos



Στράτος

Ημερομηνία: 25/4

Τμήμα: 417

Φύλο: Α Κ

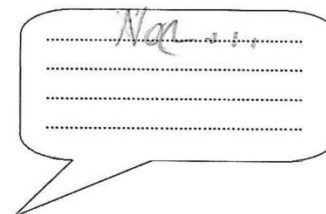
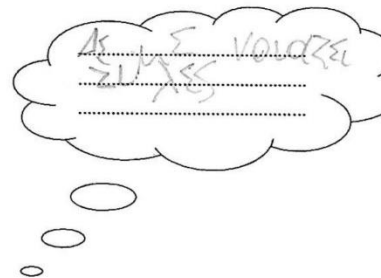
## ΤΟ ΧΑΛΙ ΤΗΣ ΓΙΑΓΙΑΣ

- Μπορείς να συμπληρώσεις στα τετράγωνα του χαλιού διαφορετικά προσωπάκια που να δείχνουν τα διάφορα συναισθήματα που έχεις νιώσει;



# ΚΑΤΙ ΔΕΝ ΠΑΕΙ ΚΑΛΑ

- Στις παρακάτω εικόνες κάτι φαίνεται να μην πηγαίνει καλά.  
Μπορείς να εντοπίσεις τι και να γράψεις στο πλαίσιο τι πραγματικά θα ήθελε να πει ο κάθε ήρωας;





- Έχει συμβεί και σε εσάς να λέτε κάτι άλλο από αυτό που νιώθετε;

Μπορείτε να δώσετε κάποιο παράδειγμα;

.....

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# ΕΝΑ ΣΥΝΑΙΣΘΗΜΑ...ΠΟΛΛΕΣ ΚΑΤΑΣΤΑΣΕΙΣ

- Μπορείς να συμπληρώσεις τα κουτάκια με προσωπικές σου εμπειρίες;

Μετάνιωσα πολύ όταν

Χζυπησα  
την αδελφη

Λυπήθηκα πολύ όταν

Χζυπησα

Γέλασα πολύ όταν

Επαιξα

Χάρηκα πολύ όταν

Επαιξα

Ξαφνιάστηκα πολύ όταν

Επαιξα

Φοβήθηκα πολύ όταν

δεν ήμουν  
φίλος

Ντράπηκα πολύ όταν

Μου επεσε  
το ΛΕΘΟ

Έκλαψα πολύ όταν

Χζυπησα

Ενθουσιάστηκα όταν

Είχα γενεθλια

# ΔΥΝΑΤΟΤΗΤΕΣ ΚΑΙ ΑΔΥΝΑΜΙΕΣ

Τα δυνατά μου σημεία (τα καλά μου!)	Τα αδύνατα μου σημεία (τα άσχημά μου)
γράφω καλά συνήθισα να γράφω καλά να γράφω καλά	γράφω κακά γράφω κακά γράφω κακά

- ♦ Ήταν δυσκολότερο να εντοπίσεις τα δυνατά ή τα αδύνατά σου σημεία;

Οχι

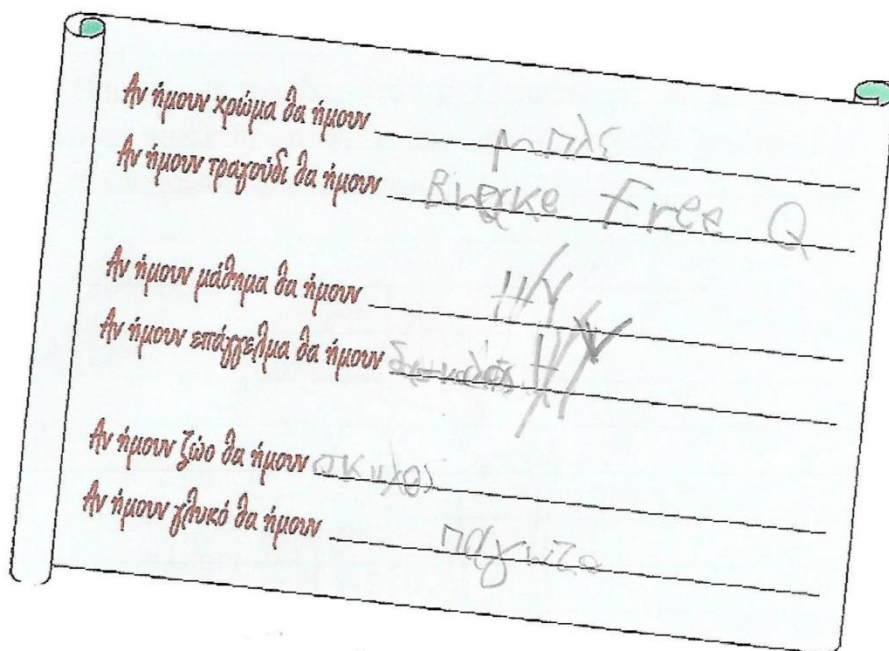
- ♦ Γιατί πιστεύεις ότι συνέβη αυτό;

- ♦ Βάλε σε κύκλο τρία πρόσωπα που θα ήθελες να πουν κάτι θετικό για σένα:

δάσκαλος, γιαγιά, μητέρα, γείτονας, αδερφός-ή, θείος, πατέρας, φίλος-η



# ΑΝ ΗΜΟΥΝ...



♦ Βλέποντας το δίπλανό σας, προσπαθήστε να σκεφτείς τι θα ήταν :

αν ήταν παιχνίδι.....

Spider-Man/Wolverine

αν ήταν ήρωας ταινίας.....

→

αν ήταν φαγητό.....

Μακαρόνια



### 3.2 Yiannis

Yiannis

Ημερομηνία: 23/9/15

Τμήμα: D'2

Φύλο: A Κ

## ΤΟ ΧΑΛΙ ΤΗΣ ΓΙΑΓΙΑΣ

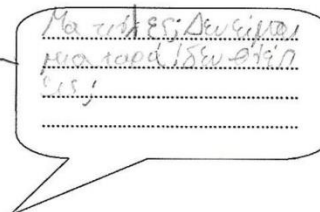
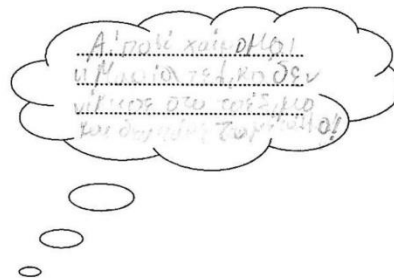
- Μπορείς να συμπληρώσεις στα τετράγωνα του χαλιού διαφορετικά προσωπάκια που να δείχνουν τα διάφορα συναισθήματα που έχεις νιώσει;





# ΚΑΤΙ ΔΕΝ ΠΑΕΙ ΚΑΛΑ

- Στις παρακάτω εικόνες κάτι φαίνεται να μην πηγαίνει καλά.  
Μπορείς να εντοπίσεις τι και να γράψεις στο πλαίσιο τι  
πραγματικά θα ήθελε να πει ο κάθε ήρωας;





- Έχει συμβεί και σε εσάς να λέτε κάτι άλλο από αυτό που νιώθετε;

*Ναι*

Μπορείτε να δώσετε κάποιο παράδειγμα;

*Όταν εγώ μιλάω και οι φίλοι μου  
μου λένε να σταματήσω να μιλάω  
ενός λεπτού.*

# ΕΝΑ ΣΥΝΑΙΣΘΗΜΑ...ΠΟΛΛΕΣ ΚΑΤΑΣΤΑΣΕΙΣ

- Μπορείς να συμπληρώσεις τα κουτάκια με προσωπικές σου εμπειρίες;

Μετάνιωσα πολύ όταν

έλεγον συνέχεια  
ψέματα στους  
γονείς μου

Λυπήθηκα πολύ όταν

έβγαλα τη Σόφια  
από το σπίτι  
μας.

Γέλασα πολύ όταν

στο διατήρημα  
έφαγα μπισκότα  
ένος παιδιού  
ότι ηρώτησα.

Χάρηκα πολύ όταν

έφαγα η μου Σόφια  
από το τουδίν  
ο.

Ξαφνιάστηκα πολύ όταν

με τσίμαξε  
η αδελφή μου  
στο σπίτι.

Φοβήθηκα πολύ όταν

πήγα να αγκαλιάσω  
την αδελφή μου  
και να με τσιμαίσει.

Ντράπηκα πολύ όταν

έλεγον το καύμα  
μου ότι θα το κάβω  
και το κάβω όλο το καύμα.

Έκλαψα πολύ όταν

πέθανε ο παπός  
αδελφός μου ηέρ  
σι.

Ενθουσιάστηκα όταν

είπα ο πατέρας  
μου ότι θα πίνω  
να συναντήσω  
τον φίλο μου  
ότι θα παλαιώσει.

# ΔΥΝΑΤΟΤΗΤΕΣ ΚΑΙ ΑΔΥΝΑΜΙΕΣ

Τα δυνατά μου σημεία (τα καλά μου!)	Τα αδύνατα μου σημεία (τα άσχημά μου)
ευσυνείδηση	αβουλία
οι φίλοι	συντηρητικότητα
καλόσωμος	δυσάρεση
πορεία	

- ♦ Ήταν δυσκολότερο να εντοπίσεις τα δυνατά ή τα αδύνατά σου σημεία;

Ήταν πιο δύσκολο να εντοπίσω τα αδύνατα σημεία.

- ♦ Γιατί πιστεύεις ότι συνέβη αυτό;

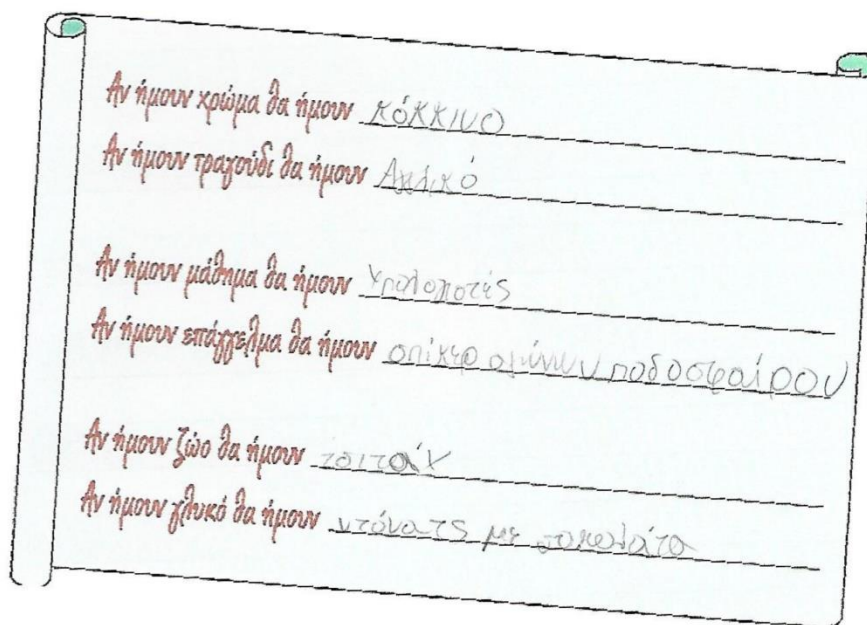
Γιατί...

- ♦ Βάλε σε κύκλο τρία πρόσωπα που θα ήθελες να πουν κάτι θετικό για σένα:

δάσκαλος, γιαγιά, μητέρα, γείτονας, αδερφός-ή, θείος, πατέρας, φίλος-η



# ΑΝ ΗΜΟΥΝ...



♦ Βλέποντας το διπλανό σας, προσπαθήστε να σκεφτείς τι θα ήταν :

αν ήταν παιχνίδι... θα ήμουν παιχνίδι της ποδοσφαίρου

αν ήταν ήρωας ταινίας... θα ήμουν ο Αντρέας Τζαβέ

αν ήταν φαγητό... θα ήμουν πατάτες



Βασιλῆς

Ημερομηνία: 23/4/15

Τμήμα: Α' 9

Φύλο: ☒ Α ☐ Κ

## ΤΟ ΧΑΛΙ ΤΗΣ ΓΙΑΓΙΑΣ

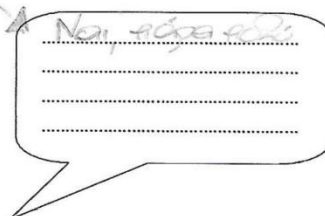
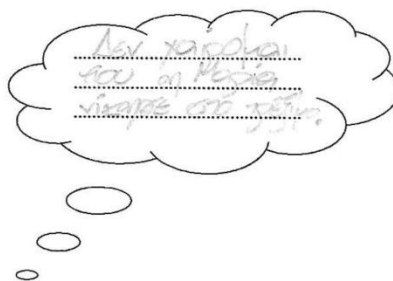
- Μπορείς να συμπληρώσεις στα τετράγωνα του χαλιού διαφορετικά προσωπάκια που να δείχνουν τα διάφορα συναισθήματα που έχεις νιώσει;





# ΚΑΤΙ ΔΕΝ ΠΑΕΙ ΚΑΛΑ

- Στις παρακάτω εικόνες κάτι φαίνεται να μην πηγαίνει καλά.  
Μπορείς να εντοπίσεις τι και να γράψεις στο πλαίσιο τι πραγματικά θα ήθελε να πει ο κάθε ήρωας;





- Έχει συμβεί και σε εσάς να λέτε κάτι άλλο από αυτό που νιώθετε;

Μπορείτε να δώσετε κάποιο παράδειγμα;

- Σε φασαριέται που έφαγα το  
- φαγητό σου από την Α/Ε; Ναι  
- Όχι, όχι!



# ΕΝΑ ΣΥΝΑΙΣΘΗΜΑ...ΠΟΛΛΕΣ ΚΑΤΑΣΤΑΣΕΙΣ

- Μπορείς να συμπληρώσεις τα κουτάκια με προσωπικές σου εμπειρίες;

Μετάνιωσα πολύ όταν

είχα φέμιστα  
στον εστέρα  
μου.

Λυπήθηκα πολύ όταν

η αδερφή μου  
μου είχε φέμιστα.

Γέλασα πολύ όταν

ο Νίκος είχε  
το ανέκδοτο  
με τον Γιώτο

Χάρηκα πολύ όταν

η μαμά μου  
μου πήρε το  
πρόσθετό και

Ξαφνιάστηκα πολύ όταν

με πρόλαξε  
ο Γιώργος.

Φοβήθηκα πολύ όταν

έχινε διακοπή  
η ταινία

Ντράπηκα πολύ όταν

Έκλαψα πολύ όταν

βουφίστηκε.

Ενθουσιάστηκα όταν

είδα την  
χρόνοση ταινία  
μου.

# ΔΥΝΑΤΟΤΗΤΕΣ ΚΑΙ ΑΔΥΝΑΜΙΕΣ

Τα δυνατά μου σημεία (τα καλά μου!)	Τα αδύνατα μου σημεία (τα άσχημά μου)
Είμαι καλός φίλος Γελάω και δεν ελάω και παίζω και δεν παίζω τους άλλους τους κάνω να γελάουν και όχι να ελαίνε	Δεν κοιτάζω ποτέ τα πράγματά μου.

- ♦ Ήταν δυσκολότερο να εντοπίσεις τα δυνατά ή τα αδύνατά σου σημεία;

Τα αδύνατα.....

- ♦ Γιατί πιστεύεις ότι συνέβη αυτό;

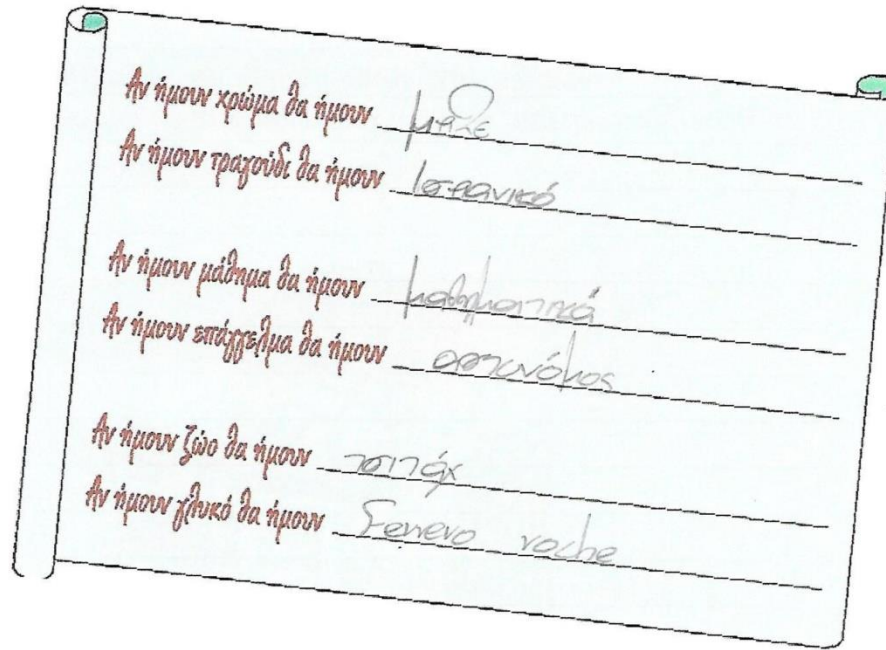
Γιατί έχω στο μυαλό μου αυτά σημεία.....

- ♦ Βάλε σε κύκλο τρία πρόσωπα που θα ήθελες να πουν κάτι θετικό για σένα:

δάσκαλος, γιαγιά, μητέρα, γείτονας, αδερφός-ή, θείος, πατέρας, φίλος-η



# ΑΝ ΗΜΟΥΝ...



♦ Βλέποντας το διπλανό σας, προσπαθήστε να σκεφτείς τι θα ήταν :

αν ήταν παιχνίδι.....Barbie.....

αν ήταν ήρωας ταινίας.....Agelina Gally.....

αν ήταν φαγητό.....αγρινός.....

### 3.4 Anastasia



Anastasia

Ημερομηνία: 02/09/25

Τμήμα: 1<sup>ο</sup>

Φύλο: Α Κ

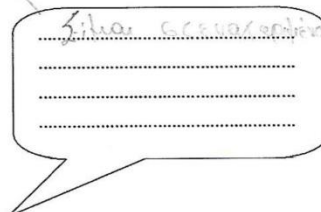
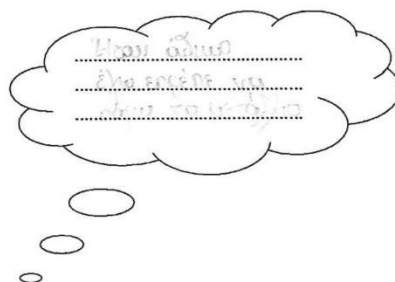
## ΤΟ ΧΑΛΙ ΤΗΣ ΓΙΑΓΙΑΣ

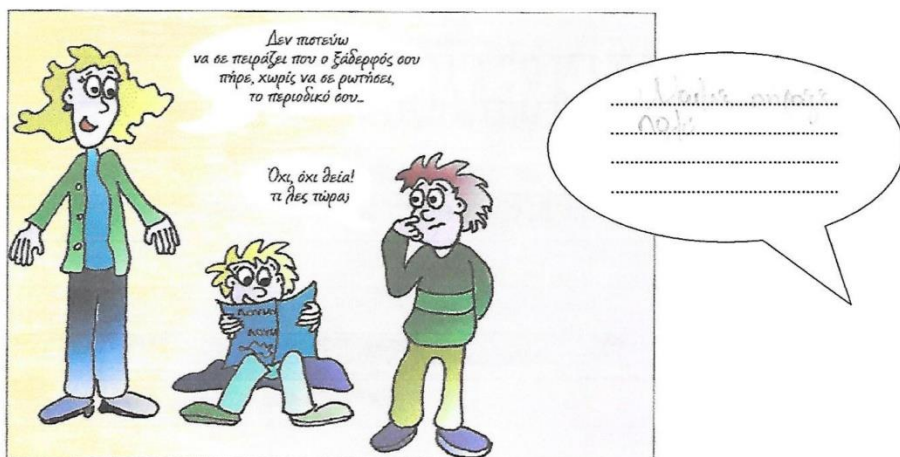
- Μπορείς να συμπληρώσεις στα τετράγωνα του χαλιού διαφορετικά προσωπάκια που να δείχνουν τα διάφορα συναισθήματα που έχεις νιώσει;



# ΚΑΤΙ ΔΕΝ ΠΑΕΙ ΚΑΛΑ

- Στις παρακάτω εικόνες κάτι φαίνεται να μην πηγαίνει καλά.  
Μπορείς να εντοπίσεις τι και να γράψεις στο πλαίσιο τι  
πραγματικά θα ήθελε να πει ο κάθε ήρωας;





- Έχει συμβεί και σε εσάς να λέτε κάτι άλλο από αυτό που νιώθετε;

Μπορείτε να δώσετε κάποιο παράδειγμα;

Μία φίλη μου, πήρε ένα περιοδικό  
χωρίς να με ρωτήσει αν ήθελα  
να το πάρω.

.....

.....

.....

.....



# ΕΝΑ ΣΥΝΑΙΣΘΗΜΑ...ΠΟΛΛΕΣ ΚΑΤΑΣΤΑΣΕΙΣ

- Μπορείς να συμπληρώσεις τα κουτάκια με προσωπικές σου εμπειρίες;

Μετάνιωσα πολύ όταν

Όταν είχα κάνει λάθος  
και είχα πει  
στον φίλο μου  
ότι είχα  
αποφασίσει  
να τον  
αφήσω.

Λυπήθηκα πολύ όταν

Η κόρη μου  
ήταν στο  
νέκροταφείο.

Γέλασα πολύ όταν

Όταν  
είχα κάνει  
ένα  
απλό  
λάθος.

Χάρηκα πολύ όταν

Όταν  
είχα  
κάνει  
ένα  
απλό  
λάθος.

Ξαφνιάστηκα πολύ όταν

Μόλις  
είχα κάνει  
ένα  
απλό  
λάθος.

Φοβήθηκα πολύ όταν

Όταν  
είχα κάνει  
ένα  
απλό  
λάθος.

Ντράπηκα πολύ όταν

Όταν  
είχα κάνει  
ένα  
απλό  
λάθος.

Έκλαψα πολύ όταν

Όταν  
είχα κάνει  
ένα  
απλό  
λάθος.

Ενθουσιάστηκα όταν

Όταν  
είχα κάνει  
ένα  
απλό  
λάθος.

# ΔΥΝΑΤΟΤΗΤΕΣ ΚΑΙ ΑΔΥΝΑΜΙΕΣ

Τα δυνατά μου σημεία (τα καλά μου!)	Τα αδύνατα μου σημεία (τα άσχημά μου)
Ξέρω καλά να βάζω σημεία.	Στανακουρίζω όταν έχω πρόβλημα
Μαθαίνω εύκολα.	Δεν πείλω καλά τα μαθήματα
Ξέρω καλά να μιλάω στα	Καλό κορίτσι δεν είμαι
Αρνούμαι την αιδεσιμότητα	

- ♦ Ήταν δυσκολότερο να εντοπίσεις τα δυνατά ή τα αδύνατά σου σημεία;

Τα αδύνατα σημεία

- ♦ Γιατί πιστεύεις ότι συνέβη αυτό;

Δεν ξέρω

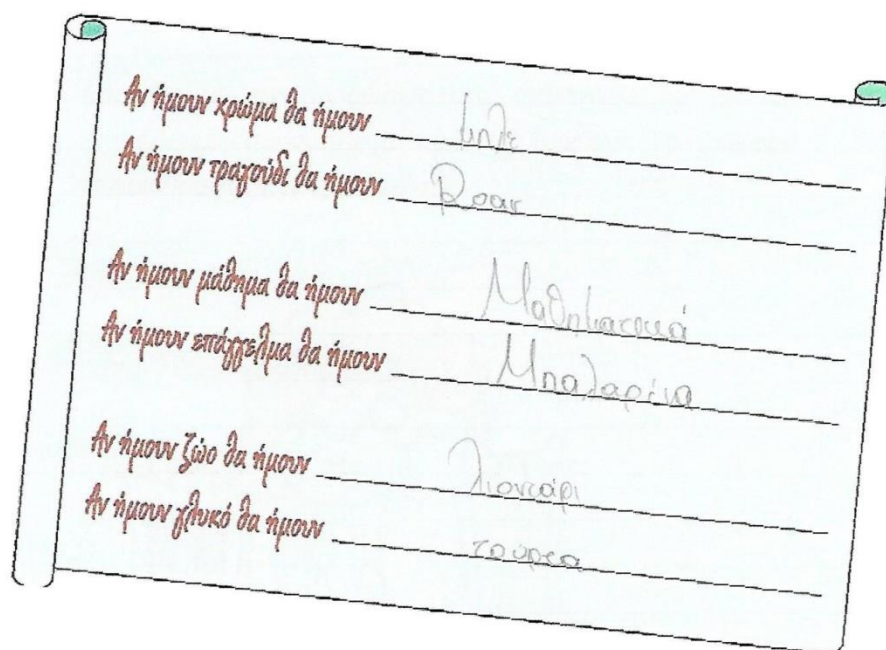
- ♦ Βάλε σε κύκλο τρία πρόσωπα που θα ήθελες να πουν κάτι θετικό για σένα:

δάσκαλος, γιαγιά, μητέρα, γείτονας, αδερφός-ή, θείος, πατέρας, φίλος-η





# ΑΝ ΗΜΟΥΝ...



♦ Βλέποντας το διπλανό σας, προσπαθήστε να σκεφτείς τι θα ήταν :

αν ήταν παιχνίδι..... τζιφι

αν ήταν ήρωας ταινίας..... Τζαν

αν ήταν φαγητό..... γουρουνόκρεο

### 3.5 Andy

☆ Αντι

Ημερομηνία: 24-4-15

Τμήμα: Δ1

Φύλο: Α (Κ)

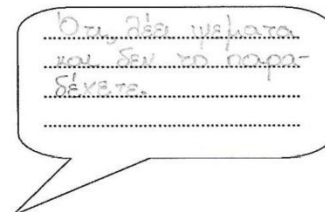
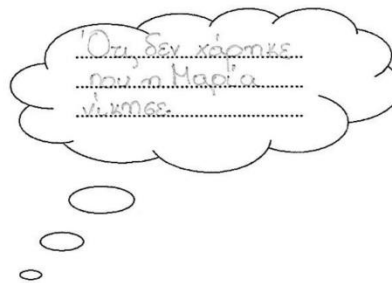
## ΤΟ ΧΑΛΙ ΤΗΣ ΓΙΑΓΙΑΣ

- Μπορείς να συμπληρώσεις στα τετράγωνα του χαλιού διαφορετικά προσωπάκια που να δείχνουν τα διάφορα συναισθήματα που έχεις νιώσει;



# ΚΑΤΙ ΔΕΝ ΠΑΕΙ ΚΑΛΑ

- Στις παρακάτω εικόνες κάτι φαίνεται να μην πηγαίνει καλά. Μπορείς να εντοπίσεις τι και να γράψεις στο πλαίσιο τι πραγματικά θα ήθελε να πει ο κάθε ήρωας;





- Έχει συμβεί και σε εσάς να λέτε κάτι άλλο από αυτό που νιώθετε;

Μπορείτε να δώσετε κάποιο παράδειγμα;

Σε ρήραφε που δεν θα κότευλε  
μαζί σου...

.....

.....

.....

.....

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.....

# ΕΝΑ ΣΥΝΑΙΣΘΗΜΑ...ΠΟΛΛΕΣ ΚΑΤΑΣΤΑΣΕΙΣ

- Μπορείς να συμπληρώσεις τα κουτάκια με προσωπικές σου εμπειρίες;

Μετάνιωσα πολύ όταν

ήνω ψέματα

Λυπήθηκα πολύ όταν

δεν πήγαμε  
βόλτα

Γέλασα πολύ όταν

μου ήνε  
ανέκδοτα

Χάρηκα πολύ όταν

ήρθαν τα  
ξοιάρφια  
μου

Ξαφνιάστηκα πολύ όταν

δεν θα γίν ει  
αυτό που ήπα-  
με

Φοβήθηκα πολύ όταν

μου φώναζε  
ο μπαμπας  
μου

Ντράπηκα πολύ όταν

με ρεζτιλίσαν

Έκλαψα πολύ όταν

με πώπλισαν

Ενθουσιάστηκα όταν

μου ήνε νέα

# ΔΥΝΑΤΟΤΗΤΕΣ ΚΑΙ ΑΔΥΝΑΜΙΕΣ

Τα δυνατά μου σημεία (τα καλά μου!)	Τα αδύνατα μου σημεία (τα άσχημά μου)
είμαι καλή	κάνω λάθη
ηαίζω καλά	δεν προσπαθώ
είμαι καλή φίλη	γελάω πολύ
	μερικές φορές κλώθω άβολα
	φονάζω πολύ (δυνατά)
	μηλαω πολύ

- ♦ Ήταν δυσκολότερο να εντοπίσεις τα δυνατά ή τα αδύνατά σου σημεία;

Τα δυνατά σημεία.....

- ♦ Γιατί πιστεύεις ότι συνέβη αυτό;

Δεν ξέρω.....

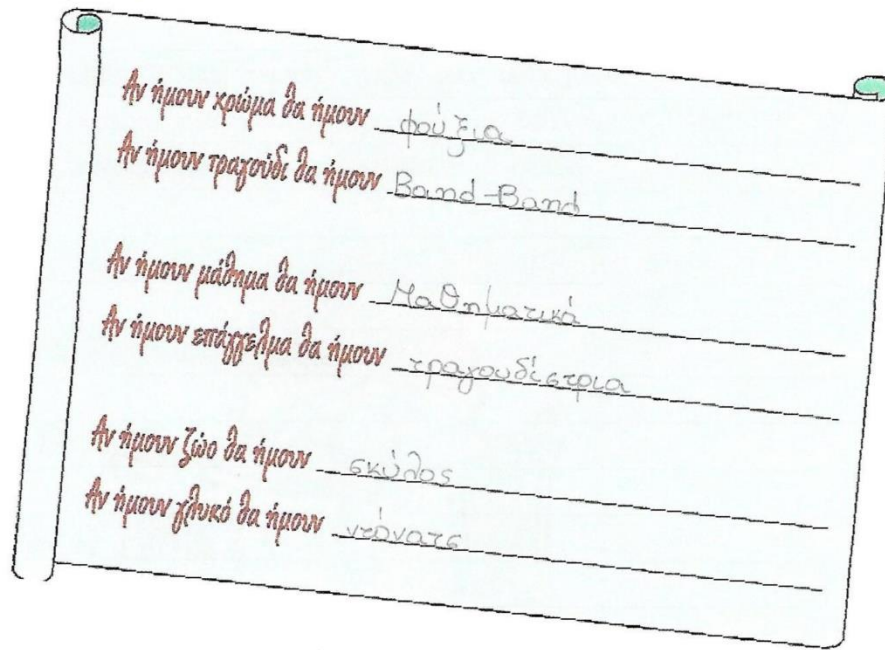
- ♦ Βάλε σε κύκλο τρία πρόσωπα που θα ήθελες να πουν κάτι θετικό για σένα:

δάσκαλος, γιαγιά, μητέρα, γείτονας, αδερφός-ή, θείος, πατέρας, φίλος-η





# ΑΝ ΗΜΟΥΝ...



- ♦ Βλέποντας το διπλανό σας, προσπαθήστε να σκεφτείς τι θα ήταν :

αν ήταν παιχνίδι... UNO

αν ήταν ήρωας ταινίας... χελιδνας για το τζούντο

αν ήταν φαγητό... φακελάκια με κρύα

## APPENDIX 4-CONSENT FORM

Αθήνα ,     /     /2015

### ΕΠΙΣΤΟΛΗ ΠΡΟΣ τους Γονείς

**Θέμα:** Διεξαγωγή επιστημονικής έρευνας

**Α γ α π η τ έ γ ο ν έ α ,**

Θα θέλαμε να σας ενημερώσουμε ότι στο πλαίσιο της μεταπτυχιακής έρευνας με τίτλο:

**Η συναισθηματική νοημοσύνη ως παράγοντας επιρροής της σχολικής επίδοσης σε παιδιά με μαθησιακές δυσκολίες.**

ζητούμε να μας επιτρέψετε να συνεργαστούμε στη διαδικασία συλλογής των ερευνητικών δεδομένων με το παιδί σας. Σκοπός της έρευνας είναι **να διερευνήσουμε εάν και πώς η συναισθηματική νοημοσύνη επηρεάζει τη σχολική επίδοση και να κινηθούμε προς τη διαμόρφωση ενός πλαισίου συναισθηματικής νοημοσύνης που δυνητικά θα μπορούσε να ενταχθεί στο σχολικό προγραμματισμό.**

Θα εκτιμούσαμε ιδιαίτερα τη βοήθεια σας στη μελέτη μας γιατί η συμμετοχή και η συμβολή του παιδιού σας στη συγκεκριμένη έρευνα είναι καθοριστική για τη διεξαγωγή της.

Η διαδικασία είναι φιλική και ευχάριστη και σε καμία περίπτωση δεν θα αποβεί σε βάρος της εκπαιδευτικής διαδικασίας. Η συμμετοχή των παιδιών στη συγκεκριμένη έρευνα είναι προαιρετική, ενώ έχει εξασφαλιστεί και η ανωνυμία τους. Όπως θα μπορείτε να διαπιστώσετε– δεν αναφέρεται κανένα προσωπικό στοιχείο των μαθητών. Επίσης, σε ότι αφορά τη διεξαγωγή της, η συγκεκριμένη έρευνα τηρεί πλήρως την επιστημονική μεθοδολογία και τα πρότυπα που υιοθετούνται διεθνώς, σε σχετικές μελέτες.

Για οποιαδήποτε επιπλέον πληροφορία και διευκρίνιση, παρακαλώ μη διστάσετε να επικοινωνήσετε μαζί μας, οποιαδήποτε στιγμή, στα τηλέφωνα που αναγράφονται στο επάνω μέρος της σελίδας.

Σας ευχαριστούμε εκ των προτέρων για τη συνεργασία σας.

Με τιμή



## ΔΗΛΩΣΗ ΣΥΓΚΑΤΑΘΕΣΗΣ

Ο/Η κάτωθι υπογεγραμμένος/η κηδεμόνας του /της ..... δηλώνω ότι ενημερώθηκα και κατανόησα επαρκώς τον σκοπό και τις διαδικασίες διεκπεραίωσης της έρευνας

.....  
.....  
.....

που αφορούν κηδεμόνα και παιδί και συναινώ στην συμμετοχή του στην ανωτέρω έρευνα.

Ονοματεπώνυμο Κηδεμόνα

\_\_\_\_\_

Υπογραφή \_\_\_\_\_

Ημερομηνία: \_\_\_\_\_

Υπεύθυνη Έρευνας - Ονοματεπώνυμο:

Μεταπτυχιακή φοιτήτρια, MPhil/Innovation in Special Needs- University of Bolton

**Τηλέφωνο :** .....

e-mail: .....